ONLINE
TODAY

THE   NS MAGAZINE

EASYPLEX™

NOT-SO-TRIVIAL PURSUITS

Theme Trivia Games Win Points with Players

RUSSIAN REPORTAGE

IQuest Database Taps into TASS News

Deliverance

ronic Mail Cuts Delays,
oves Communications

C O N T E N T S

E L E C T R O N I C   E D I T I O N

Online Today Electronic Edition provides daily-updated computer and information industry news, coverage of CompuServe services, commentary, computer product reviews and more.

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Don't Stay Home Without Us.℠

Electronic mail has cancelled out such problems as differing time zones, frustrating games of telephone tag and the delay of overnight package deliveries.

In fact, we would have a difficult time producing this magazine without it. Since *Online Today* writers span eight time zones from London to Los Angeles, we rely on electronic communications in coordinating assignments and deadlines, especially for *Online Today Electronic Edition*, which is updated several times a day.
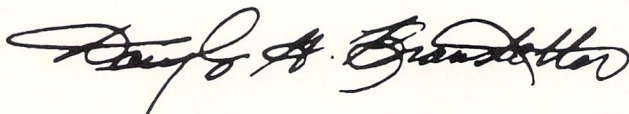
Electronic mail is available to large and small businesses alike, and its greatest benefit may be to small businesses needing a cost-effective link to potential customers, manufacturers and sales people.

EasyPlex, CompuServe's electronic mail system, recently has added capabilities designed for the small business user, including a mailing list feature, carbon copy option and a Telex link; a hardcopy delivery service soon will be available. With the addition of the Telex link, it no longer matters if the electronic mail recipient has online access. With about 180,000 Telex terminals in the United States and another 1.5 million worldwide, this EasyPlex enhancement expands the small business universe.

This month's cover story, "Electronic Mail: Catalyst of Change," beginning on page 14, explores how small businesses are using electronic mail and answers common questions about EasyPlex commands.

* * *

If you're looking for the perfect activity for a dreary winter evening, read about "Not-so-Trivial Pursuits" on page 22. A multiple choice of educational and entertaining online trivia games awaits novice and expert players. Chances are, you'll discover that you know more than you thought did. If so, you may want to match wits with fellow trivia buffs in one of the "Know-It-All-Nights" sponsored by *You Guessed It!*. The 24-hour competitions have included such themes as celebrities, literature and sports, and winners can trade points for prizes.

Douglas G. Branstetter
Editor

Keep your mainframe in touch:
Send your remote PCs a card!

If a telephone line goes to wherever your remote PCs are, Sync-Up™ from UDS can now link them directly to your mainframe!

Sync-Up fits a complete synchronous modem and a protocol converter onto a single card; no other modules are required. Add appropriate UDS-supplied software, and you'll have a fast, reliable micro-to-mainframe link. If your system is already supporting 201C, 212A, 208A/B and/or 9600B modems, no modifications are required at the mainframe end.

Sync-Up boards may be specified with software to support 3270 BSC, 3270 SNA or a variety of other protocols. For complete technical data and quantity prices, contact Universal Data Systems, 5000 Bradford Drive, Huntsville, AL 35805. Telephone 205/721-8000; Telex 752602 UDS HTV.

Universal Data Systems

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Information Systems Group

GO EBB or circle 7 on the Reader Service Form.   Created by Dayner/Hall, Inc., Winter Park, Florida

Guidelines to Requesting Information Through EBB

Electronic Bounce Back

Electronic Bounce Back is *Online Today*'s electronic version of the traditional reader inquiry card. To request additional information about products or services described in *Online Today*, simply access CompuServe and type GO EBB at any prompt.

CompuServe	Page EBB-1

ONLINE TODAY ADVERTISERS ELECTRONIC BOUNCE BACK (EBB)

1. EBB Instructions
2. Online Today Display Ads
3. Print Edition Reviews
4. Shopper's Guide Classifieds

Display Ads

GO EBB-160. Inquiries to this section will be followed by a brief description of the *Online Today* ad. To request additional printed information, simply enter your name and address at the prompts. EBB will add your User ID number and electronically forward your request to the appropriate advertiser(s). The names, addresses and User ID numbers will also be forwarded via US Mail at the end of each month.

CompuServe	Page EBB-160

ONLINE TODAY ADVERTISERS/EBB

1. Jan. 1987 Advertisers
2. Dec. 1986 Advertisers
3. Nov. 1986 Advertisers

Editorial Articles/Reviews

At the end of each electronic version product review, you'll be asked if you wish to request further information through the Electronic Bounce Back system. A "yes" response will let the system prompt you for your name, address and other information so that your request can be forwarded to the appropriate company. If you respond "no," the system will return you to the previous menu.

To request information about products reviewed in the print edition, go to page EBB-280 and select the appropriate listing, such as January Hardware Reviews. At the next menu, select the product you're interested in. If you answer "yes" at the question prompt, the EBB system will prompt you for the necessary information.

Requests to these sections will be stored and forwarded by traditional mail once each month.

CompuServe	Page EBB-280

REVIEW LISTINGS/PRINT EDITION

1. Jan. Hardware Listings
2. Jan. Software Listings
3. Jan. New Product Listings

Shopper's Guide

GO EBB-70. This is *Online Today*'s classified section and is designed to enable readers to easily scan areas of interest.

To request information from Shopper's Guide advertisers, send messages via CompuServe EasyPlex or use traditional methods of communication.

CompuServe	Page EBB-70

SHOPPER'S GUIDE

1. About Shopper's Guide
2. Rates and Information
3. Software
4. Services
5. Hardware
6. General

*Note:
Additional requests during the same session will not require you to re-enter your name and address.

Uploads Column

I've always liked the concept of the ''Uploads'' column. Keep up the good work.

I do have a suggestion. I think you should include the name and User ID number of the person who contributes each file, so the ''uploaders'' will get the credit they deserve.

Mike Schoenbach
Bellmore, N.Y.

Securities Database

Exactly how does one access the International Securities Database mentioned in the November issue of *Online Today*?

Edward Taussig
Jackson Heights, N.Y.

Editor's Note: The International Securities Database is available to CompuServe's Business Information customers. To find out how to obtain access to this database, contact the nearest CompuServe branch office, listed on page 33.

Searching IQuest

I enjoyed the article about how to use IQuest to search newspaper databases (November issue, p. 56) but I have a few questions.

The author states that there is an access charge of $7 for the initial search and that you can view one story from that search for no extra charge. What is the charge to view an additional story? Is billing based on a flat fee each month or will I be charged only for the time I use?

If I wanted to search for articles in two newspapers, would the cost automatically be $14? Would the IQuest service check several newspapers?

Would I be charged $7 if I looked at a database to see if it would be useful or would I be charged only if I decided to start a search?

Doris Patterson
Ardmore, Pa.

Editor's Note: The charge to view an additional article through IQuest is $7. For example, if you wanted to search two newspapers and select one article from each, the charge would be $14. You will need to search one newspaper at a time rather than asking IQuest to check several newspapers. The charge would be the same if you wanted to view two articles from one search ($7 to do the search and view one article and $7 to view an additional article from that search).

The first search charge of $7 begins when IQuest accesses the database you've chosen (after the keywords are entered and confirmed). Although you cannot view the entire contents of an IQuest database, you can narrow your search by various fields in databases such as Magazine ASAP. This process may help you to decide whether or not the database will be useful to you. Until IQuest actually begins the search process, you can type ''B'' to back up to previous screens.

Your IQuest charges are based on the amount of time and the number of searches you do. There is no flat fee or monthly minimum charge to use IQuest. CompuServe connect time charges and communications surcharges are in effect, but again, these charges are based on how much time you use online.

For more information about IQuest, type GO IQUEST at any prompt on the CompuServe Information Service.

High-Tech Fraud Puzzles Parents

Is a teen-ager being "good" when he or she sits for hours in front of a computer screen, connected via modem to electronic friends nationwide? Not necessarily.

Telecommunications and computer fraud typically is committed by teen-age males who may be involved in a number of activities — including making long-distance calls with someone else's access code and using credit card numbers from discarded carbons to order merchandise and sign-up for computer services — according to CompuServe's Security Administrator Dan Piskur.

Parents are dumbfounded by it all. They readily accept that a child has erred when he shoplifts from a department store, but stealing telephone and computer services and direct order merchandise is perceived differently, usually because many parents do not understand what is involved.

"Parents can teach their kids it is wrong to shoplift, but it doesn't occur to them that theft also can be committed electronically. Parents may not understand the technical aspects of the computer, but they must be aware of what their children are doing with that computer and modem," says Piskur.

While CompuServe has actively pursued criminal prosecutions, the most effective solution to the growing problem of high-tech fraud is education, he says. Parents, teachers, law enforcement officials and the business community should take responsibility for educating young people about the ethics of computer use. Before that first computer lesson begins, teachers should present solid views on the ethics of illegal software copying — which amounts to nothing less than theft — and, of accessing computer services illicitly.

"Kids sometimes receive mixed signals from their teachers," he says, adding that some teachers will illegally copy a software program and defend such action because the school has not provided funds for purchase.

Often, young people become more knowledgeable about programming than the teachers in a short time. Then it is hard for instructors to teach ethics because the kids think they know more than the teacher. A partial solution would be to invite members of law enforcement agencies and the business community into the schools to offer their views on computer ethics.

Piskur says most of the young people
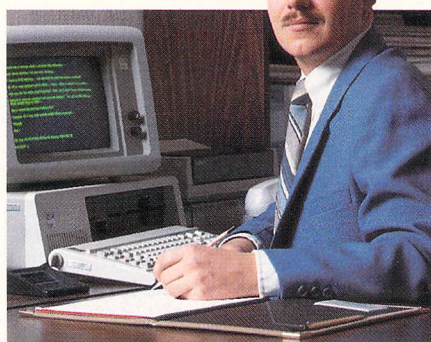
Tracking tech fraud: *Piskur*

he deals with are "basically good kids" — teens who, for instance, probably would not shoplift or commit burglary. "They doubt they are doing something wrong from the safety of their bedrooms. There is a certain excitement from being a participant in activities they consider questionable but that are in fact criminal. I believe it is the risk that makes it so tantalizing."

Piskur explains that two attitudes are prevalent: first, computer services are intangible products and, thus, have no real value, making theft somehow acceptable. Second, even if computer services are of value, they are being stolen from a corporation, which is not as bad as stealing from a person.

"The fallacy is that fraudulently ordered merchandise is billed to the innocent person whose credit card number is stolen. Even if his bill is later corrected,

the damage has already been done. His credit limit has been affected, and, in some cases, money actually has been removed from his account," he says.

Piskur notes that while computer crime legislation has been enacted in more than 25 states, sometimes the statutes are not fully understood by the law enforcement community. "Those involved in the criminal justice system need to be educated to recognize the serious nature of these offenses. They understand the traditional concept of theft and fraud when an individual steals merchandise valued at $50, but sometimes stealing $1,000 worth of computer services is considered to be less serious. A lot of crimes are not being prosecuted because of a failure to understand," he says.

Parents, too, must take responsibility by getting "in touch with what their children are doing, or they will find out when the police confiscate the computer equipment and cart Junior away," says Piskur.

While the advantages of having a computer linked by modem to commercial databases are many — providing access to information, knowledge, entertainment and education — "with these additional opportunities come new responsibilities and the potential for misuse," says Piskur.

— *Cathryn Conroy*

Foundation Tests New Math Concept

What would happen if you gave America's elementary school students access to computers and calculators? Smarter kids? Lazier kids? An 8-year-old running IBM? A 6-year-old editing *Monitor* (heh-heh)?

Well, the National Science Foundation wants to find out what would happen. It wants to find out so badly, in fact, that it is going to spend $5 million of its money to find out. Actually, it's not the NSF's money, it's ours, but you know that.

The grants will be used to develop model mathematics curricula and instructional materials for schools that have calculators or computers for students' use. The largest of the awards, $1,385,859, will enable the Education Development Center of Newton, Mass., to lay the foundation for a new elementary mathematics curriculum that will in-

corporate the use of computers and calculators. If deemed successful, the curriculum will be distributed to elementary schools nationwide.

The new curricula will be designed to enable students to experience mathematics as serving useful and interesting purposes, treat problem solving as the central mathematics activity and build mathematics concepts on concrete experiences, according to the NSF.

Dr. John A Thorpe, director of the Instructional Materials Development Program at the NSF, said the grants are the result of a call for proposals to address the shortage of instructional materials that take into account the computational technology now available to both children and adults.

More information is available from the National Science Foundation, 1800 G St., Washington, D.C. 20550; 202/357-9859.

Experts Testify on Telecommuting Topic

Is working from home an innovative choice of employment locale or a step backward to the days of cottage sweatshops?

As the number of telecommuters increases, Congress has begun to pay attention to the trend, inviting experts to testify on the topic.

One hearing conducted by the US House of Representatives' Committee on Government Operations examined whether those engaged in home-based clerical work are victims of exploitation. The committee concluded that home-based clerical work does "offer benefits to society, workers and employers, provided adequate protection and support are available." It further stated that the biggest stumbling block to successful telecommuting is the classification of home-based workers as independent contractors when they legally are employees.

The committee's report states, "For many women home-based work is a desirable choice; for others it represents a better-than-no-work option. All home-based workers are entitled to full protection of the laws covering on-site workers. They must not be invisible cogs but equitably treated members of the labor force. Federal and state government agencies, employers and community organizations should share in meeting this goal."

One problem cited in the report is the lack of easily available, quality that child care, a situation that often forces women to seek home-based employment. The committee recommended that child care services be "greatly expanded" and tacitly endorsed a national child care program so women will not "continue to be compelled to struggle with individual solutions to the major societal problem of child care."

Not everyone agrees with these findings.

In addition to a minority committee report signed by four congressmen refuting the conclusion that exploitation of home-based workers is prevalent, Paul and Sarah Edwards, telecommuting experts, believe the report was an attempt to create problems where few exist.

"It is wise to be alert to potential problems, but this reaction is disproportionate to the situation. Working from home is a positive trend that will open possibilities. In fact, people are clamoring for this type of work. To define this option categorically as negative is short-sighted," Sarah Edwards says.

The Edwardses believe developing national child care is not in line with federal funding needs, and point out that current laws clearly determine whether a home-based worker is an independent contractor or employee.

Noting that the American labor movement is at an all-time low, Paul Edwards says, "Labor unions have staked out a new domain in the white-collar clerical worker, but there is not much opportunity to organize those people who are independent from the work place. This committee report reflects the views of labor unions and organizations such as 9 to 5 who believe the onerous, evil conditions of home-based businesses years ago will occur now."

The Edwardses, forum administrators of CompuServe's Working From Home Forum (GO WORK) and authors of *Working From Home*, emphasize that home-based workers have been proven to be more productive and that they seek home-based employment because they desire more independence and control in their lives than a traditional job will allow.

For more information, contact the Employment and Housing Subcommittee, Committee on Government Operations, US House of Representatives, 2157 Rayburn House Office Building, Washington, DC 20515; 202/225-6751.

— *Cathryn Conroy*

Add-on Publishers Get Marketing Tips

As any good personal computer entrepreneur knows, the Lotus aftermarket is sizzling. With 3 million to 4 million users of 1-2-3 worldwide, the demand for program add-ons seems insatiable.

The result has been a glut of companies marketing software designed to give 1-2-3 users more productivity. Next to makers of "Baby On Board" signs, 1-2-3 aftermarket publishers make up one of the world's biggest marketing enterprises.

To exploit this trend, Rick Gibson has formed The Consortium Inc., a service organization that helps add-on publishers get their products placed on crowded dealers' shelves. The Consortium helps its 15 charter members and 10 development contractors tackle such knotty problems as advertising, trade show representation, dealer negotiations and market research. For a fee, it also will provide business planning and other advisory services.

Gibson said he got his inspiration for The Consortium during negotiations
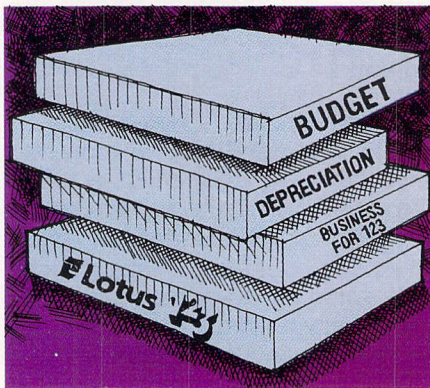
with Lotus for its eventual acquisition of GNP Development Corp., the publisher of the HAL natural language interface. Gibson, at the time, was GNP's chief operating officer.

"It made me realize how difficult it was for a company that didn't have a hot program like HAL to make it. How can they compete against big companies that dedicate entire departments to advertising, marketing, promotion and dealer relations?" he asked.

The Consortium is a classic example of the power in numbers theory, according to Gibson. "Most dealers can't be bothered with sorting through hundreds of Lotus add-on products. They don't have the time or the shelf space. What happens is that the little guy with a good program gets lost in the shuffle," he said.

Gibson noted that his seven-employee organization functions as a sort of "Good Housekeeping seal of approval" for dealers. "Dealers know they can trust us because we've screened the products. They also know that we'll be here tomorrow to provide support."

Gibson claimed that The Consortium is "a good deal all around." He said, "The dealer benefits because he has better software to sell, the consumer benefits because he gets the software he needs and the member benefits because he gets his product to market."

More details are available from The Consortium Inc., 11935 Charnock Rd., Los Angeles, Calif., 90066; 213/390-3403.

— *John Edwards*

Committee Selects Computer Titles

Selecting books for children is a task most parents take seriously, but finding suitable computer books for kids can be difficult because so few are reviewed.

The Child Study Children's Book Committee at New York's Bank Street College has taken the task and now recommends five new computer books. The annotated list of nearly 700 fiction and non-fiction titles was selected from more than 3,000 juvenile books published during 1985.

Selected titles of computer books are:
• *Computer Maintenance* by D.J. Herda, illustrated by Anne Canevari Green, Watts, $9.40 (for children 12 years old and older)
• *Computer Sense Computer Nonsense* by Seymour Simon, illustrated by Steven Lindblom, Lippencott, $10.50 (for children 8 to 10 years of age)
• *Computers: A Look Inside* by Paul Z. Zomberg, Raintree, $11.64 (for children 8 to 11 years of age)
• *More BASIC: A Guide to Intermediate*

Level Computer Programming by Shelley Lipson, illustrated by Janice Stapleton, Holt Rinehart and Winston, $9.95 (for children 8 to 14 years of age)
• *The Story of Computers* by Ian Litterick, illustrated by Chris Smithers, Bookwright, $9.40 (for children 12 years old and older)

This is the third year the committee has specifically recommended computer books, and the group's computer specialist is the first to admit the list is small.

Teacher Muriel Mandell says, "The reason the list is so limited is most children's computer books are terrible."

She advises parents to look for accuracy, clarity, readability, objectivity and careful differentiation of fact from surmise. In addition, illustrations should be clear, accurate, appropriate and consistent with the text.

For more information about the work of the committee, which has been recommending children's books for more than 50 years, contact Anita Dore, Child Study Children's Book Committee at 212/663-7200, ext. 503.

— *Cathryn Conroy*

Dealer Takes Guests on Computer Cruise

Hoochama Goochama! These, friends, are tough times in the ol' computer biz.

Dealers are finding themselves increasingly hard-pressed to come up with new ways to move their products. For example, a ValCom franchise in Chicago recently rented a boat, decked it out with 18 computers and invited 100 of its major corporate customers for a cruise on Lake Michigan. The result? Three hundred systems were sold, accounting for more than $2 million in sales and nary a case of sea-sickness, reported owner Robert Green.

Monitor wasn't able to discover whether the systems were equipped with parallel ports, an RS-232-SEA interface or an ability to handle floating point calculations. Time to bail out.

Communication is the heartbeat of any organization, large or small. Telephone calls, stacks of memos in the in-box and executive chats over lunch all are part of the continuing, ever-changing process of organizational communication. That communication now is undergoing such a profound change that it is nothing short of revolutionary. What is the catalyst of this change?

ELECTRO

By Cathryn Conroy

Electronic mail offers businesses instant access to the world. Different time zones, frustrating "games" of telephone tag and the short delays caused even by overnight mail deliveries no longer are problems.

Although electronic mail systems are invaluable to large corporations, their greatest benefit to small businesses may be in providing a crucial link to potential customers, manufacturers and sales representatives. Electronic mail gives a business a competitive edge, making it easier to clinch a major sale, successfully enter new markets and increase profits.

EasyPlex: Link to the world

Just because a business is small doesn't mean it has to forego the latest in high-tech communications. EasyPlex, CompuServe's electronic mail system (GO EASY or GO MAIL), recently has been enhanced to meet the special needs of small businesses.

"Many small businesses use electronic mail services because they are cheaper and faster, but they hit a stumbling block when some of their recipients are not equipped to receive electronic mail," says EasyPlex Product Specialist Beth Sibbring.

To address this problem, a Telex link has been added to the service, and a hardcopy delivery feature is planned for the future. "These enhancements will take even the smallest business into the high-tech age," Sibbring says. "No longer must our subscribers send electronic mail only to others online.

The new Telex service enables subscribers to transmit a message electronically to any Telex terminal in the world. With about 180,000 Telex terminals in the United States and another 1.5 million worldwide, this EasyPlex enhancement expands the small business communications universe.

"Many companies using Telex as their means of communication prefer it. The advantage of this EasyPlex enhancement is that a small business can communicate in the medium preferred by those customers but generate its own preferred message in the medium," notes Sibbring.

Telexes sent within the continental United States cost about 65 cents per 300 characters, while the cost of those sent to foreign countries is determined by regulatory agencies within each nation.

Although designed for the small business user, the new Telex link is available to all CompuServe subscribers and is part of the EasyPlex menu. Subscribers need not do anything special to access it.

These enhancements to EasyPlex are only the beginning, according to Sibbring. Future plans call for a hardcopy delivery service, a copy command that would allow users to easily

keep personal copies of messages they send to others, a simple forms capability, the ability to send longer messages than is now permitted, broadcast codes for a mailing list capability and more "read" options.

But even with all these features, there still is one more reason why EasyPlex is unique among electronic mail systems: it is a component of the most extensive and complete information service available. Since EasyPlex is just one of hundreds of services available on CompuServe, users of this electronic mail system can do more than send and receive messages. They also can check stock quotes, read the latest Associated Press news, make airline reservations, "talk" with colleagues in forums and more.

Taking the electronic plunge

Although the benefits are extraordinary, the process of adopting an electronic mail service can be difficult. "The electronic message will replace a lot of telephone calls and written memos. It *will* change the way people communicate. More than the tool is being replaced; the method of communication is being replaced," says Dave Bezaire, CompuServe's product manager for electronic communications.

And change doesn't always come quickly. Rather, organizations using electronic mail typically experience sev-

NIC MAIL.

eral stages of change before the electronic link is fully adopted.

The first phase, according to Bezaire, is simple acceptance of this medium. "It's a new method of communicating, and some people will be excited about its potential, while others will be threatened or even intimidated by it. Learning to accept the new medium is the first step for those using it," he explains.

Peter Holsberg, a professor of electronic engineering technology at New Jersey's Mercer County Community College is a case in point. He launched a small computing business on the side, which he named PCLAB Computing (The acronym stands for the initials of Holsberg, his wife and their three children). Holsberg does some technical writing for a PCLAB client based in Chicago.

"Right now I am sending messages on EasyPlex to this client rather than telephoning," he says, noting that the difference in time zones is not a problem with electronic communication.

But Holsberg has bigger plans in mind. He wants to upload the full text of his technical writing work to the client, rather than sending it through the mail. The client, however, still is adjusting to this new form of communication and is not quite ready to receive that much information electronically. "Eventually this will happen, though," he predicts.

Getting comfortable

Becoming comfortable with electronic communications is the second phase of change, according to CompuServe's Bezaire.

"The tool will be used as a replacement for something that now exists," he says. "For instance, forms will be replaced with electronic mail to shorten delivery times. This will typically result in cost savings so people will use it more. As they use it more, they will develop a greater comfort level."

Wendy's, a fast-food chain based in Columbus, Ohio, is a pioneer in the use of electronic mail. The company has its own private InfoPlex system, a CompuServe electronic mail product offering numerous customization features for large businesses. InfoPlex is applications-oriented and is especially useful for customized electronic business forms, such as sales order entry forms and travel forms.

Although Wendy's is pleased with InfoPlex's in-house capabilities, the company wanted to communicate with more than its own employees and turned to EasyPlex for this external link.

Wendy's purchasing department staff now communicates regularly with about 15 distributors for pricing information on fresh produce. Naturally, Wendy's wanted to get the best possible price on everything from carrots to potatoes and

decided the most efficient way was through a kind of electronic bidding system through the EasyPlex-to-InfoPlex link.

The 15 distributors use EasyPlex to regularly submit their individual produce prices on specially designed electronic forms. By following a few simple address commands, the distributors send their messages directly to the InfoPlex mailbox of the Wendy's purchasing department. Wendy's then selects the best prices.

This type of electronic mail use is actually among the most prevalent. "The information and time savings that come about by using electronic mail translates into lower prices and ultimately better sales and new profitability," says Bezaire. Many other clients use InfoPlex forms similarly to speed up the sending of messages among the internal sales force. All of this contributes to new sales and revenue."

Let's be creative!

The third phase in adopting electronic mail is creativity. Once people have accepted it and become comfortable with its extraordinary capabilities, they begin to invent creative uses for it.

"People start to communicate in a different mode because the medium allows it. For instance, there are more informal surveys being taken and more informal

groups developing to communicate about a given topic,'' says Bezaire. In addition, communication is broadened within an organization since many individuals can be copied electronically with one message.

Being creative is Ron Solberg's area of expertise. Solberg, second vice president of corporate affairs for Chicago's Continental Illinois National Bank and Trust Co. and forum administrator of CompuServe's Public Relations and Marketing Forum, uses EasyPlex in several ways.

He and public relations colleague Dori Danielson edit and produce the monthly newsletter of the Chicago chapter of the Public Relations Society of America. Solberg writes and edits all the copy and uploads it to Danielson via EasyPlex, who, in turn, downloads it to her Apple Macintosh computer, reformats it and produces a professional-quality publication on her laser printer.

In addition, Solberg edits a newsletter for the midwest district of PRSA, spanning 13 chapters from Minneapolis to Memphis. To keep the newsletter as timely as possible, he sends it to the other chapters through MCI Mail minutes after it is composed.

Solberg not only uses the electronic medium in new and creative ways, but he is almost an ''electronic minister,'' determined to spread the good news to anyone who will listen. This fall he and four other Public Relations Forum colleagues used EasyPlex as the medium for planning a unique course they hope to offer this year.

The course, designed for public relations and marketing professionals, is an introduction to computer communications. Students will not only learn how to use a computer to access several commercial databases but also will leave the class with their own computer, modem and subscription to three services in hand.

''We're organizing the course online using EasyPlex. One of us will send a message to another and then use the ''multiple send'' option for the other three. An ongoing discussion has developed — a discussion that is time-efficient. We spend our time online focusing on the issues and the questions at hand. We're getting a lot accomplished by doing it this way,'' says Solberg.

He says they also intend to use EasyPlex to promote the course. ''By using the upcoming hard-copy capability, we will be able to send electronic messages to potential students. This works out well because we will be demonstrating to our audience the very thing we are trying to tell them about.''

Electronic reliance

In the fourth and final stage, companies come to rely on electronic mail, as they fully realize and benefit from the enhanced communications environment.

''There is a certain informality that is fostered by the way people use electronic mail as opposed to the way they would write a memo or act in a formal meeting,'' says Bezaire.

Electronic mail opens up new communication channels as individuals within an organization have access to everyone else. Anyone with an electronic mailbox

How to Develop EasyPlex Expertise

To make full use of the power of EasyPlex and the advantages it offers small businesses, you need to learn how to manipulate its many features.

Special features ideal for small businesses include Receipt Request, File in Personal Area, Use a File from Personal Area, EasyPlex to InfoPlex, EasyPlex to MCI Mail and Multiple Send. Some of these features carry surcharges, ranging from 10 cents to $2. After typing in the recipient's name, User ID number and the message subject, you will be asked, ''Is this correct?'' and the exact amount of the surcharge will be displayed. After you answer Y (for yes), the message will be sent, and you will be assessed the appropriate surcharge. If you answer N (for no), you will be given the option of sending the message through the usual EasyPlex channels requiring no surcharge, to choose a different surcharged option, to edit the message or to cancel it.

When sending an important letter through the US Postal Service, business users often request a receipt by using certified or registered mail. But unlike the USPS, CompuServe's charges for Receipt Request are minimal at just 25 cents.

If you would like to know that your electronic message has been received, select ''SEND with /RECEIPT ($)'' (option 5 on the EasyPlex Main Menu) or type /SEN/REC after you have composed or uploaded the message. The ($) means there is a surcharge for this feature; in this case, it is 25 cents.

Your Personal File Area (GO PER) on CompuServe is a special section in which you can store and manipulate files. Upon entering the area, you will see a menu, which includes a ''Brief CATALOG of Files'' and a ''Detailed DIRECTORY of Files.''

When you ask for a catalog of files, you will see two files, EMAIL.DAT and EMAIL.ADR. The first is a file of the messages currently stored in your EasyPlex mailbox. The second is your EasyPlex Address Book of frequently used names and User ID numbers. All other files in your Personal File Area are files you have selected to be stored there.

To store files in your Personal File Area, you can either upload from your microcomputer's disk, create a file online in your Personal File Area or compose an EasyPlex message and then file it. To upload, select option 9, ''Upload or download a file,'' and follow the menu prompts. To compose a file online, select option 3, ''Create and edit files via EDIT.'' There is no surcharge for this service.

You can file electronic messages you send to others in your Personal File Area. This is particularly useful for those who may have a boilerplate letter that is sent frequently and requires only minor editing to personalize it.

To retrieve a file from your Personal File Area and place it in EasyPlex for editing and sending, select ''USE a file from PER area'' (option 4 on the EasyPlex Main Menu). The system will prompt you for the filename and it will instantly be transferred to EasyPlex. There is no surcharge for this service.

now has access to top management. Before this electronic link, such access was not possible as phone calls are screened by a secretary and mail is often opened by someone other than the intended recipient.

"Some organizations may feel threatened by this much communication if they have a strict hierarchical structure or if they want to keep things tightly controlled. Other organizations, though, have a creative atmosphere and value a close relationship with their customers. When that is the case, this exchange of information can greatly enhance the company's ability to meet the needs of a rapidly changing environment," explains Bezaire.

One such company is Nimrod Software, a Berkeley, Calif., firm run by Kenneth R. Kroth, who boldly claims, "We wouldn't exist without EasyPlex."

Kroth publishes a weekly newsletter through EasyPlex that serves as an update for his stock market strategy software product, Megabucks.

"Our customers are looking for that gem of a stock amidst tons of data. Our newsletter helps them sort it all out." Using a computer analysis and advanced statistical treatment of stock market data, Kroth selects 75 stocks, and through the electronic newsletter updates those companies' earnings, dividends and splits.

"There is no question that electronic mail is the wave of the future, and it will save the trees, too," he quips.

Looking in the crystal ball

The future of electronic mail is promising, although some industry analysts voice disappointment that it has not grown as rapidly as was originally projected.

Others believe acceptance is running high, especially because of the somewhat radical change in communication patterns that adoption of electronic mail has created.

Eric Arnum, editor of *Electronic Mail and Microsystems*, a publication of the Norwalk, Conn.-based International Resource Development Inc., estimates about 5 to 6 percent of those who have computers on their desks actually are using electronic mail now. "It's not amazing. It's not a breakthrough. But it is respectable for a technology that is just 10 years old," he says, noting the telephone did not even have this level of market penetration 25 years after its invention.

IRD estimates there are nearly 1 million business users of the three major commercial electronic mail systems, of which EasyPlex is one.

"Electronic mail is slowly gaining acceptance. Give it another 10 years, and I'd say it will be a mass-scale, business communications tool," he predicts.

CompuServe's Bezaire believes the future will see everyone in an organization with access to electronic mail. "The companies that experience the most success with it are the ones where actual users include upper level executives and management as opposed to those who simply delegate its use to the secretary. Real creativity comes from using the electronic mail system and having a commitment to it."

He predicts the future will see not only internal use of electronic mail but also external use. "It's an evolutionary process. Once there are enough people who find it beneficial, it is only natural to move to include the company's suppliers and customers, the law firm and other external parties, much like Wendy's is doing now."

Electronic mail is flexible, economical and immediate. Its features translate into productivity improvements for increased profits. What more could a business ask for?

Cathryn Conroy is a contributing editor of Online Today. *Her CompuServe User ID number is 70007,417.*

InfoPlex is CompuServe's electronic mail product designed especially for large organizations. EasyPlex users can send a message to those with an InfoPlex mailbox by typing a ">" sign, the InfoPlex organization code of the InfoPlex box and the user's InfoPlex address code at the "Send to:" prompt.

The command looks like this: ">" ORGANIZATION CODE:ADDRESS CODE. The ">" sign signifies to EasyPlex that this message is going to a remote electronic mail service. The organization code represents the host organization's code, and the address code represents the recipient's specific mailbox address on the organization's InfoPlex system.

Next, press the Return key, type in the subject name and receive verification from EasyPlex (the "Is this correct?" statement). At this time you will be informed that sending a message from EasyPlex to InfoPlex carries a surcharge of 45 cents.

InfoPlex addresses can be entered into your EasyPlex Address Book, but they *must* be preceded by the ">" sign for the system to recognize their InfoPlex destination.

The EasyPlex to MCI Mail feature adds another 200,000 users to CompuServe's 315,000 subscribers for a potential electronic community of more than half a million people to whom you can send electronic messages.

Sending an EasyPlex message through MCI Mail is the same as sending to InfoPlex. At the "Send To:" prompt, type >MCIMAIL:XXX-XXXX. "XXX-XXXX" is the format of MCI Mail's numeric User ID numbers.

Again, MCI Mail addresses can be stored in your EasyPlex Address Book, but they must begin with the ">" sign.

The following surcharges are assessed for this service:
• Messages of 1 to 500 characters, 45 cents
• Messages of 501 to 7,500 characters, $1
• Each additional 7,500 characters, $1

Business users who want to send the same message to more than one person will find the Multiple Send feature useful.

There are two ways to do this. The first is to send the message as usual to the first recipient. As soon as this is done, return to the EasyPlex Main Menu and select option 8, "SEND last message." You will again be prompted for the name, User ID number and subject. Repeat as many times as you wish.

Another way to send the message to several users is to type up to 10 names and User ID numbers at the appropriate prompt, separating each with a semicolon. You can type names or User ID numbers, or a combination of names and User ID numbers.

There is a surcharge of 10 cents for each subsequent message. That is, you will be charged 90 cents for sending one message to 10 people since the first does not carry a surcharge.

— *CDC*

Common Questions About EasyPlex

Q: How do I set up my own name as the "signature name" for all of the EasyPlex messages I send?

A: Type GO EASYPLEX from anywhere on the CompuServe Information Service and choose the "Address Book" option from the EasyPlex Main Menu. At the EasyPlex Address Book Menu, select "Enter/Change your own name." EasyPlex will display your "old" name (if any) and prompt you for your "new" name. Type in your name as you would like it to be on your EasyPlex messages and press the Return key.

Q: I've heard that I can avoid EasyPlex's prompts for address information by including the information in the text of the EasyPlex message. How do I do this?

A: To "imbed" information within the text of an EasyPlex message, you must type "To:," "From:" and "Subject:" followed by the appropriate information at the beginning of the first three lines. The colons must be included. For example:

To: 70000,0000
Fr: Sandy Smith
Subject: Lunch Tomorrow

You can use the name instead of the User ID number of a recipient if you have previously entered the recipient's name and User ID in your EasyPlex Address Book. If you've entered your own name in your Address Book, "EasyPlex will include the "Fr:" line for you.

Q: Where can I find assistance in using EasyPlex?

A: CompuServe provides a range of services to help you use EasyPlex. Try taking advantage of any or all of the following:

While using EasyPlex:

Online Help — At any EasyPlex prompt, you can type HELP or HELP [topic]. Typing HELP will cause a menu of EasyPlex topics to display for which help is available; typing HELP [topic] (for example, HELP READ or HELP ADDRESS BOOK) will display instructions and information for the EasyPlex topic you specified.

EasyPlex News — To find how to use and get the most from the latest EasyPlex service enhancements, type NEWS (not GO NEWS) at any EasyPlex prompt.

Ask Customer Service:

Questions and Answers — You can find answers to many frequently asked questions on EasyPlex quickly and easily in Customer Service's online Questions & Answers service by typing GO QUESTIONS at any prompt.

Feedback — If you need help not found in the Questions & Answers service, send Customer Service an electronic message through the Feedback service. A representative will respond via EasyPlex as quickly as possible. To access the service, choose "Feedback" from the Questions & Answers menu or type GO FEEDBACK.

Calling Customer Service — If you have a question or problem that can't be resolved by using the services described or referring to the CompuServe Users Guide, call Customer Service. To find the hours and telephone numbers at which a representative can be reached, type GO QUESTIONS.

Q: Suppose I accidentally delete an EasyPlex message that I've received. Can I "undelete" it?

A: Yes. To undelete a message type UNDELETE at the EasyPlex Main Menu's "Enter Choice !" prompt. A menu of all messages deleted during your current EasyPlex session will display, and you can choose the message(s) you wish to have restored.

Note: You can restore only those messages that have been deleted during the *current* EasyPlex session. Once you exit EasyPlex, it is not possible to use the UNDELETE command.

Q: Can I delete messages without reading them, and if so, how?

A: Yes. To delete messages — read or unread — simply type DELETE, press the space bar, type the message number(s) you want to delete and press the Return key at any EasyPlex Main Menu or Read Menu command prompt. For example:

Enter choice ! DELETE 1,3,5-9 <CR>

If the message you are deleting has not been read, EasyPlex will ask you to verify your request and then delete the message(s).

Q: I went on vacation and when I came back my EasyPlex Address Book was gone! What happened to it?

A: Since your EasyPlex Address Book is stored in your Personal File Area (in a file named EMAIL.ADR) it, like other Personal File Area files, is deleted if it has not been accessed in 30 days, or six months if you have the Executive Option. This is most likely what happened to your Address Book. Your EasyPlex Address Book is automatically accessed each time you enter EasyPlex.

Q: How do I change my EasyPlex mode? I'm stuck in Command mode and can't get back to Menu mode.

A: EasyPlex offers different modes that allow you to customize the way that EasyPlex menus and messages appear on your screen. To change modes, select "SET options" from the EasyPlex Main Menu. For a description of the different modes, enter HELP at the "Enter choice" prompt. You may choose to make changes in your settings effective for the current session only or for current and future sessions.

If you want to view EasyPlex menus but cannot because you are in the Command or Prompt modes, type SET MODE MENU at the "EasyPlex!" prompt and press the Return key. This will return you to the Menu mode for the current session. Once in the Menu mode, be sure to follow the above steps if you would like your changes to be effective for future sessions.

Q: How do I use the new EasyPlex /SEArch and /DIRectory commands?

A: Both of these commands are issued while you are at the EasyPlex "Send to:" prompt, preparing to "address" a message for delivery. To display all the entries in your Address Book, type /DIRectory at the EasyPlex "Send to:" prompt. Once you have viewed all entries and determined which one(s) to use, press the Return key to return to the EasyPlex "Send to:" prompt.

To search your Address Book for entries with a specific name, type /SEArch, press the space bar, enter the name for which you want a search, and press the Return key. For example:

Send to: /SEArch Susan <CR>.

Once the entries have been displayed, press the Return key to return to the EasyPlex "Send to:" prompt.

Q: Can I set my log-on actions to go directly to EasyPlex when I have mail waiting?

A: Yes, or you can set your log-on actions so that only a message displays when you have mail waiting. Just follow the steps below.

1. Type GO TERMINAL at any prompt and choose the option "Setting Your log-on Actions."

2. Next, select the option "First Service Is." CompuServe displays a menu from which you can choose one of the following to happen when you log on to the Information Service and have EasyPlex mail waiting.

Go to EasyPlex — Takes you directly to EasyPlex.

Notify only — Displays only a message that you have mail.

Before leaving the TERMINAL/OPTIONS area, you will be asked if you want your changes to be effective for future sessions or for only that session. Be sure to select ''Make all changes effective for future sessions.''

Q: I have my log-on actions set to go to EasyPlex when I have mail waiting, but sometimes I get a ''What's New'' menu instead of going directly to the mail that awaits me. Why does this happen?

A: To help keep you aware of changes to the Information Service, CompuServe displays the latest ''What's New'' menu during the log-on process regardless of how your log-on actions are set. Generally, once you see the latest ''What's New'' menu three times, it automatically will stop displaying when you log on. The following week's ''What's New'' menu usually will begin displaying on Thursday night. If you do not wish to read the items on the ''What's New'' menu press the Return key at the ''Enter choice !'' prompt and you will go right to your EasyPlex messages.

Q: Can I send a message that I've just composed in a forum to my friend's EasyPlex mailbox?

A: Yes. At the Leave Action Menu's ''Enter Choice !'' prompt, type one of the following:

MA — Your message will be mailed and formatted to the width of the reader's screen.

MU — Your message will be mailed and remain formatted exactly as you have entered it.

After you type MA or MU, your message will be sent to your friend's EasyPlex mailbox. If, however, you did not enter your friend's User ID number at the ''To:'' prompt while composing the message, you will be prompted first to type his or her User ID number before the message is sent.

Note: Messages cannot be sent to an EasyPlex mailbox and posted on a forum's message board at the same time.

— *Matthew Burns and Beth Sibbring*
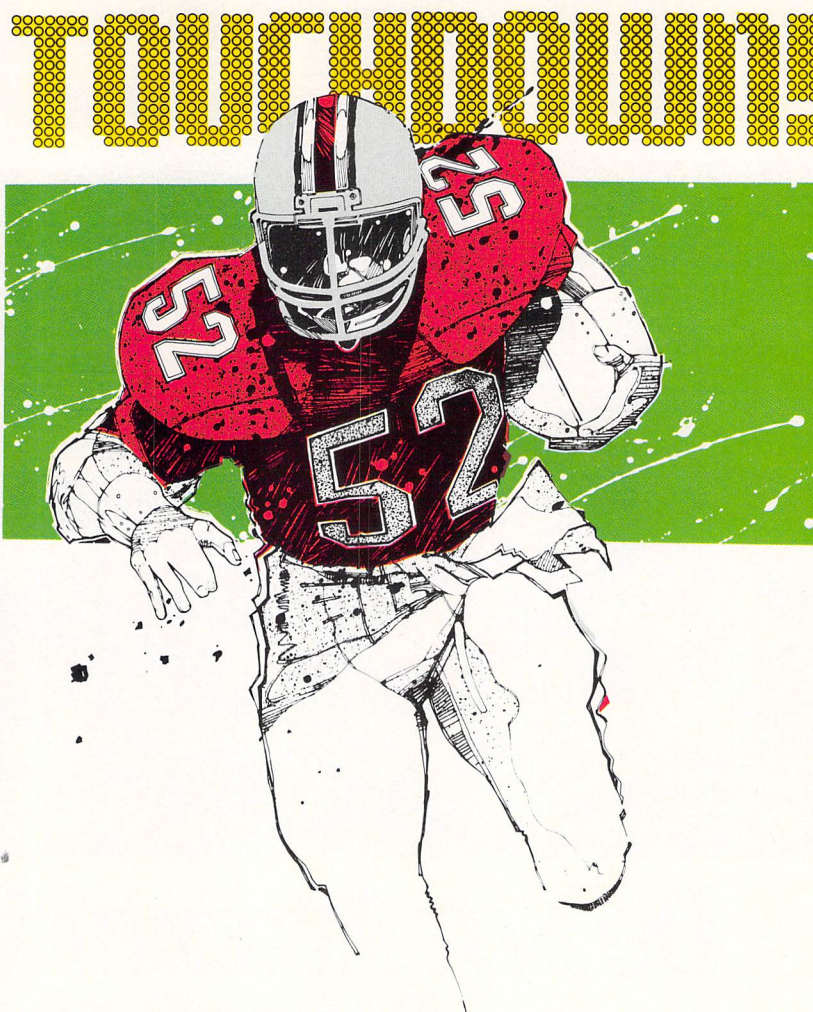
Football has been a favorite pastime of online sports fans on CompuServe for several seasons. Pick a team name. Select offensive formations. Call plays. Punt? Pass? Kick? Coach, it's your call.

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This season we're pleased to announce the formation of the **Advanced Digital Football League**. This simulation includes timed quarters of play, a time clock, time outs, a variety of play formations (you can also create your own) and an online ''Assistant Coach'' (whose advice you're welcome to ignore)!

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Drafted? Not signed? Get in either game! Just type GO FOOTBALL or GO ADFL at any prompt on the CompuServe Information Service.

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Technology, Games Programs Online

The data libraries in CompuServe's forums are filled with thousands of programs and textfiles. Following are only a few of the files uploaded to CompuServe forums recently:

AMIGA FORUM
(GO AMIGAFORUM)

Amiga Host — A telecommunications package for the Amiga featuring file transfer with B protocol as well as XMODEM, a scripting language, RLE graphics and more. Files AHOST.EXE and AHOST.DOC in Data Library 4.

BBS List — A listing of Amiga Bulletin Boards — 166 of them in 36 states. File BBS.TXT in Data Library 4.

ARTIFICIAL INTELLIGENCE FORUM
(GO AIE)

Online Guru — A series of files describing and implementing a demonstration system called GURU to show how artificial intelligence systems might be used in business applications. To start, read file GURU.TXT in Data Library 5.

ATARI 8-BIT FORUM
(GO ATARI8)

Nuclear Puzzle — A game in which you try to figure out the launch code to avoid a nuclear disaster. File LAUNCH.BIN in Data Library 1.

Pinball Game — For the Atari 8-bit computer. File STAR40.XMO in Data Library 1.

List Your BBS — SIG*ATARI wants to list your bulletin board system in its data libraries. To learn how, see file BBSLST.TXT in Data Library 7.

Kill The Bacterions — A game in which you are the only hope for mankind, whose rulers have been infected with deadly Bacterions. You move about the rulers' brains trying to destroy the Bacterions before they grab the cells at the center of the screen. File BACTER.XMO in Data Library 1.

TV Game Show — A game for the Atari based on the "Wheel of Fortune" television show. Includes 900 different puzzles. Files WOFSCR.XMO and WOFDOC.XMO in Data Library 1.

Modem Chess — Play chess over your modem with a remote opponent. File TELECH.XMO in Data Library 2.

BORLAND APPLICATIONS FORUM
(GO BOR-200)

Reflex Answers — A textfile containing a compilation of the most frequent questions and answers for the IBM PC version of Reflex, the Borland database.

File QNAREF in Data Library 7.

COMMODORE ART AND ENTERTAINMENT FORUM
(GO CBMART)

Music, Music — Turn your Commodore 64 into a music machine for experimentation with wave forms, octaves, sounds and songs. File MUSICO.BIN in Data Library 1.

HEWLETT-PACKARD PC FORUM
(GO HP100)

Font Adapter — A program called Newfont for Vectra users with Enhanced Graphics Adapter and Enhanced Color Display. Newfont will change the IBM text font to the Hewlett-Packard text font as well as alter the default color palettes. File NEWFNT.ARC in Data Library 4.

IBM COMMUNICATIONS FORUM
(GO IBMCOM)

PC Terminal Program — The latest version of John Friel's QMODEM terminal communications program. File QMDM2E.ARC in Data Library 3.

Sorting It Out — DELSORT takes the textfiles derived from a CAT/DES scan of a data library and sorts them by name, date or User ID number, deleting duplicate entries; File DELSOR.ARC in Data Library 2.

New PC-TALK Version — The latest version of PC-TALK, the most famous shareware communications program for the PC has been altered for use with CompuServe. File PCTC.ARC in Data Library 3.

Retrieval System — A bulletin board retrieval system for getting and storing messages on CompuServe forums. For use with Microsoft's Access communications program. Files SCRIPT.ARC and SCRIPT.TXT on Data Library 2.

IBM HARDWARE FORUM
(GO IBMHW)

Parking Program — A program for parking a hard disk before moving the equipment. Compatible with most major controllers. File PARKIT.COM in Data Library 1.

IBM NEW USERS FORUM
(GO IBMNEW)

Help — A textfile for users of IBM PCs and compatibles detailing information about downloading from forum data libraries. Includes information on the various protocols, how to set CompuServe defaults, how to find files of interest and other solutions to common problems. File DL.HELP in Data Library 1.

MAUG APPLE II/III FORUM
(GO APPLE)

Personal Budget Demo — A demonstration module of a shareware program that allows tracking of your personal budget on an Apple II. Includes check-writing, numerous types of reports, transfer of data to Appleworks. File CHECK.DMO in Data Library 1.

MAUG MACINTOSH USERS FORUM
(GO MACUS)

RAM disk program — RAMStart, a RAM disk program for the Macintosh. Makes the RAM disk the startup disk if desired. File RAMSTA.BIN in Data Library 1.

Recover A File — MacWrite Rescue, a utility that will recover MacWrite files that can no longer be opened with MacWrite. File RESCUE.BAS in Data Library 3.

MEDSIG
(GO MEDSIG)

Computer Malpractice — A summary of a lengthy discussion on the MEDSIG message board dealing with the legal implications of physicians who use malfunctioning medical software. File FAULT.SUM in Data Library 2.

MICROSOFT FORUM
(GO MSOFT)

Help Windows — Add 80 windows to the IBM PC using MS-DOS or PC-DOS. Detailed help is available in the windows for any DOS, Debug or EDLIN command. FILE ASSIST.ARC in DL 0.

OMNI FORUM
(GO OMNI)

Minsky Speaks — Transcripts of an online conference with artificial intelligence expert Marvin Minsky. Files MINSK1.CO and MINSK2.CO on Data Library 8.

SPACE FORUM
(GO SPACEFORUM)

Life In Space — A report on a speech by astronaut Bob Cenker who flew as an RCA payload specialist aboard the shuttle Columbia's last successful flight. Cenker talked about everyday life aboard the space shuttle. File SPACEL.IFE in Data Library 1.

TANDY PROFESSIONAL FORUM
(GO TRS80PRO)

Computer Cards — 3BY5, a freeform information management program that can be used to store, retrieve and output "3 by 5" cards of information. File 3BY5.ARC in Data Library 6.

Dave Peyton co-authored How to Get the Most Out of CompuServe. *His CompuServe User ID number is 76703,244.*

Not-so-Trivial Pursuits
Online Trivia Games Educate, Entertain Players

Trivia has many intrinsic values, according to Dr. Howard Millman, a clinical psychologist and professor at the University of Maryland, Baltimore County campus.

"The games sharpen skills that can be applied both on the job and in the classroom," says Millman, who designed *The Multiple Choice* and *Stage II Trivia* games for CompuServe. "It is not only intellectually stimulating but also it teaches us how to better reason things out," he says.

CompuServe trivia enthusiasts can learn that Burma Buddhists celebrate the New Year by hurling water at each other, that the word "blimp" was derived from an Army directive to build a B-class limp airship and that the "Ed Sullivan Show" marked the second US television appearance of the Beatles.

"Because it provides recognition for accumulated knowledge, trivia also helps build self-confidence. Trivia enhances our ability to make that educated guess," he adds. "These exercises attract intelligent people, who almost always are surprised to discover they know more than they thought they did."

The games also can serve as a role model for new, young trivia buffs. "When kids see their parents taking and enjoying tests, they realize learning can be more fun than school work," Millman says.

CompuServe offers a vast array of trivia for all levels of knowledge. Generalists can choose the following:
• *The Multiple Choice* (GO TMC). The format for adults and children provides questions requiring a type-in reply (for example, "waterspout" is the answer to "What is a tornado that forms over water?") After a miss, the correct answer is given with an additional detail or subject-related fact.

Adults can compete with themselves or others in Trivia Unlimited. Choose a 10-question "warm-up" test or a "sudden death" match. In a match, players keep answering until they miss five questions. Bonus questions add extra points.

Players compete for inclusion in the Trivia Honor Roll. They can choose from seven categories in trivia including the Bible, sports and the movies. Children select folk and fairy tales, animal facts, and science and nature.

In *Stage II Trivia*, you answer a round of six questions and then try to discover their theme. Participants can guess the theme any time during the round, but the sooner you figure it out, the more points you get. You can end the game whenever you choose. High scorers are included in the *Stage II* Spotlight. Through a special arrangement with the authors of the original *Stage II* box game from Milton-Bradley, CompuServe offers more than 6,000 questions.
• *The Whiz Quiz* (GO WHIZ). *The Whiz Quiz* provides players with a mini-lesson consisting of an interesting fact before the question. The multiple-choice question allows two chances for a correct response, followed by another bit of information. You might learn, for example, that Shirley Jackson's short story "The Lottery" first appeared in *The New Yorker* in 1948.

Four people can play *The Whiz Quiz*. The same category can be repeated because each 30-question game is randomly chosen from a large data pool. Your name is posted in the Whizard Hall of Fame if you get a perfect score. Regularly updated and alternated topics include current events, art, architecture and Who Said That?

If you prefer specialized categories or want to expand your knowledge in a given area, CompuServe offers these games:
• *Traveler's Challenge* (GO ETC). This 30-question, multiple-choice game from the Educational Travel Connection tests the knowledge of the seasoned traveler. Like many CompuServe trivia games, additional enlightenment is provided after your answer. Categories of history, geography, people and things to see are offered with a free T-shirt incentive for

the highest first-time scorer. Other high scorers are included in the ETC Hall of Fame.
• *ShowbizQuiz* (GO HHL) (GO SBQ). Eliot Stein's Hollywood Hotline offers a daily *Showbiz Trivia Quiz* and a Texas-sized selection of quizzes. The daily quiz, a multiple-choice question, can touch any aspect of the entertainment industry.

Elvis Presley, Frank Sinatra, Bruce Springsteen, Bette Davis, Dustin Hoffman, and "Star Trek" are the topics of some of the specialized quizzes. Aficionados can discover how much they *really* know about their favorites.

General entertainment trivia also is plentiful here. Not only can you test your Showbiz IQ, (if you get a high score you're eligible for an Entertainment Ph.D.) but there are eight Showbiz trivia games, covering popular music, the Academy Awards and television.
• *Science Trivia* (GO SCITRIVIA). In a more serious vein (no pun intended), *Science Trivia* covers biology, chemistry, physics and mathematics. Questions match the style and complexity of the College Board's Achievement and Advanced Placement Tests. Players needing to discuss a question or response choice can participate in the weekly student/teacher conferences in the Science and Math Forum (GO SCIENCE).

The forum administrators change the multiple-choice questions each week, so you can continue to sharpen your abilities. One to four people can play; high scores are included in the Science Trivia Hall of Fame. The game is especially useful in preparing for school tests and college entrance exams.

Several CompuServe forums also offer trivia games. The Health Forum (GO

YGI!
YOU GUESSED IT!

HCM) not only hosts occasional trivia nights with a prize of free connect time, but it also provides an interactive quiz on Acquired Immune Deficiency Syndrome. In addition to testing your knowledge, this clearly written and well documented AIDS quiz gives detailed, scientifically based information and cites reference sources.

If a player types a wrong answer, he will be given appropriate information, thus "customizing" the quiz to match his knowledge.

The Florida Forum (GO FLORIDA) sponsors a daily Disney trivia question and Disney and Florida attraction trivia nights every Tuesday at 9 p.m. EST. During the contests, points are awarded for correct answers and can be exchanged for various prizes. Players can earn extra points for correct answers to matching or type-in questions for "experts."

Data Library 7 of the Florida Forum contains the Disney questions and related articles on trivia.

Three other forums — Music, Science Fiction and Fantasy, and Aviation — offer trivia at various times.

The Music Forum (GO MUSIC) also has dedicated DL 7 to general music trivia. A Beatles game can be found in DL 4, the Beatles subtopic. More quizzes should be coming soon.

Science Fiction and Fantasy (GO SCIFI) contests vary in content, covering such topics as Doctor Who and sci-fi thrillers. Future games will be on "Robotech," "Star Trek" and possibly comic books.

The Aviation Safety Institute (GO ASI) has a series of quizzes to test pilots' knowledge and recall of flight. Each quiz has an automatic grading feature to let players know immediately how well they performed. Players can retake missed questions. If you did not know there were six solo flights across the Atlantic prior to Lindbergh's, you will the second time around.

Computer-based trivia induces "a state of relaxation similar to meditation," according to Millman. "Even though it's challenging, most people find the games recreational and stress-reducing."

This winter, turn on your computer and choose your game (see accompanying chart for Quick Reference Words). Where else can learning be fun in so many places?

— Sandra Gurvis

Know-It-All Nights Attract Trivia Buffs

Through the CompuServe grapevine (otherwise known as forum bulletin boards) "Johnny Guitar," a rock-and-roll buff, learned that *You Guessed It!* (GO YGI), the multiplayer trivia game that simulates and parodies a game-show broadcast, was hosting another "Know-It-All Night." Questions about music, with emphasis on the 20th century, were to be featured. "Hey, this is great!" thought Johnny, whose primary contact with CompuServe had been through his interest in music. He participated in *YGI!* and now is an avid player.

Although "Johnny Guitar" is not a real person, his story mirrors those of many dedicated *YGI!* aficionados. "We're trying a crossover program by having forums sponsor various theme nights," says Susan Moehl, new product development manager for Hallmark. Moehl and CompuServe administer the game. In exchange for advertising *YGI!* within several forums, each sponsor "broadcasts" advertising spots about the service during actual games.

"Know-It-All" night questions touch on all aspects of a theme, and more than one answer is possible. For movies, you may be asked to name a picture with a number for a title. For example, "2001," "1941," "1984" and several others fit the bill. During history night, players might be asked to name a well-known ancient Greek. Anyone who fits that category, from Socrates to Aristotle, is the correct answer.

Past "Know-It-All Nights" have featured such diverse topics as home, health and family; entertainment and celebrities; language and literature; science and nature; and sports. The programs are broadcast 24 hours a day and usually are held on weekends so subscribers can participate at their convenience.

"This draws in new people, and the *YGI!* regulars benefit from matching wits with the 'experts,'" Moehl says.

YGI! allows one- to three-player teams to answer trivia questions on a round-robin basis. During regular games, questions cover any topic, but are limited to the theme subject during the "Know-It-All" night. Each game lasts about a half hour. Correct answers are based on a survey of the players. Teams garner points on a graduated basis. The "most popular" answer is worth three points, while total misses get zero. Winners can "cash in" their points for prizes, including VIDTEX software, pen and pencil sets and free CompuServe connect time.

The real draw of *YGI!* and trivia nights is not the prizes but the players. "The game not only develops online communication skills but provides a meeting ground for people from all over the country," according to "Rosey Dawn," a game operator (hostess) and self-employed businesswoman. "The questions always are challenging. You can get a nearly perfect score on one match and be completely at sea during the next."

"Cash," a senior vice-president of a mortgage firm, adds, "Instead of playing a computer, you're competing against a real person. You learn a lot in an entertaining, humorous way. But it's addictive," he warns.

Cash, Rosey Dawn and others have made friends via telephone, letters and travel. "It's a real community," says Rosey Dawn. As a game operator, Rosey is responsible for introducing newcomers and helping them become familiar with procedures. "At first it can be a little disorienting. We want to make everyone feel welcome," she says.

You don't have to "know it all" to participate. Type GO YGI and prepare to have fun.

— SG

Ask Customer Service

Q: How can I get rid of the welcome message that is displayed each time I access EasyPlex?

A: You need to create an EasyPlex Address Book. Each time you access EasyPlex, the system checks to see if you have an Address Book. If it does not find one, it assumes you are a new subscriber and displays a welcome message.

To create an Address Book and avoid the message, simply type GO EASYPLEX and choose the option "Address Book." Your Address Book is stored in a file, which, if not accessed within 30 days (or six months if you have the Executive Option), will be automatically deleted.

Q: I have noticed I can access CompuServe through several networks. What are the differences among them? Which is the most economical for me to use?

A: You can access the Information Service through CompuServe's own network or through a supplemental network such as TYMNET or Telenet. CompuServe's network is owned and maintained by CompuServe while supplemental networks are owned by other companies. Since CompuServe must pay these other companies for use of their equipment, it is generally more economical to access the service through CompuServe's network.

If a local CompuServe network access number is not available to you, there may be a local supplemental network access number in your area. To find out, type GO PHONES at any prompt on the CompuServe Information Service. If only long distance access numbers are available to you, you may find that dialing an out-of-state CompuServe network access number is more economical than dialing an in-state supplemental network access number. Check with your telephone company.

Q: Where can I go online for general help and answers on using the service?

A: New subscribers are welcome at the *Online Today* CompuServe Connection Forum. A large portion of the forum is devoted to fielding questions about how to use CompuServe and where to find services online. To access the forum, type GO OCC at any prompt.

Another one-stop place online to find answers to your questions is Customer Service's Question & Answer Database. Q&A offers examples and instructions to provide assistance. To access Q&A, type GO QUESTIONS at any CompuServe Information Service prompt.

Q: As a new subscriber, I don't know where to begin. How can I find those products and services that match my interests?

A: Use CompuServe's FIND command. Type FIND at any prompt, press the space bar, type a subject that interests you and press the Return key. After searching the subject index for matches, CompuServe will display a menu of services that relate to your interests. You also can view an index of unique page numbers of various services by typing the Quick Reference Word GO INDEX at any prompt. You then can search for specific subjects or display the complete list of topics.

Q: Are there some areas that new subscribers cannot access?

A: Yes. Some of CompuServe's services cannot be accessed until a subscriber has a permanent password. The password is generally recognized by the system 10 days after you complete the online sign-up procedure. If you attempt to enter such a restricted area, an on-screen message will remind you that you cannot access that particular service until you have your permanent password.

Q: How can I minimize the time I spend navigating the service?

A: CompuServe provides online and offline documentation to help subscribers find what they are looking for quickly. The CompuServe Information Service Users Guide contains detailed instructions on using and navigating the service. CompuServe's *Online Today* magazine features information on new products and services and updates about existing services.

If you are interested in browsing through the hundreds of services and products that CompuServe offers without actually visiting them online, the CompuServe Product Almanac may be just what you need. The almanac is organized in chapters that reflect the 12 choices on the top menu. Chapters contain a description and quick reference word for each product; the information is arranged in menu order. To order the almanac, type GO ORDER at any prompt on the CompuServe Information Service.

electronically yours,

THE NEWSLETTER OF THE ELECTRONIC MALL™

EDITORS: CINDY MORGAN, LAURIE McSWEENEY, MARY BETH ZACKS.

JANUARY/FEBRUARY 1987, VOLUME 3, NUMBER 1

Tax Time at The Mall

To help you make sense of the new tax laws—and to make preparing your taxes as easy and painless as possible—The Electronic Mall has put together a special TaxTime database **(GO TAX)** featuring:

- Online Tax Tips
- Tax Preparation and Financial Planning Software
- Books and Magazines on taxes, money and investments
- A capsule look at the financial products and services offered by many Mall merchants
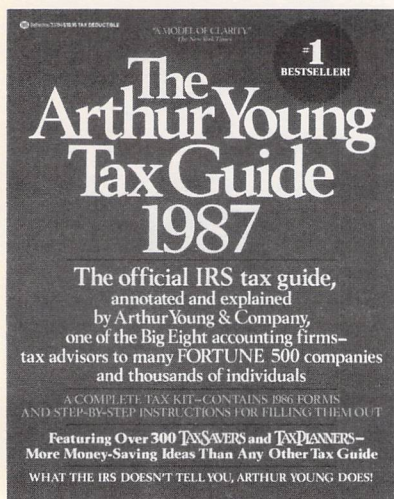
No matter what type of personal computer you own, you'll find a tax preparation package. INVESTMENT SOFTWARE **(GO IS),** specializing in software for the IBM PC and compatibles, is featuring *Howard Soft Tax Preparer.* Also offered are the *Howard Soft California Supplement* and the *Howard Soft Tax Preparer Partnership* packages. SOFTWARE DISCOUNTERS OF AMERICA **(GO SDA)** offers *Swiftax* by Timeworks for the Commodore, Apple and IBM. COMPUTER EXPRESS **(GO CE)** recommends *J.K. Lasser's Income Tax* (Apple, Commodore, IBM and MAC). And at MARYMAC INDUSTRIES **(GO MM)** you'll find a selection of investment software for the Tandy, including Andrew Tobias' *Managing Your Money.* In the special tax database you'll find full descriptions of each package to assist you in selecting the best program.

Also featured in this special database

are books and magazines to assist you in preparing your taxes and meeting your financial goals. BALLANTINE BOOKS **(GO BAL)** highly recommends *The Arthur Young Tax Guide 1987.* This bestselling book includes detailed, up-to-the-minute explanations of all new and significant changes in tax laws and regulations. WALDENBOOKS **(GO WB)** offers a selection of *"No Nonsense Financial Guides"* on topics such as IRAs, money market funds and tax-exempt bonds. Each is only $3.95! Also featured is the new 1987 H&R Block Tax Guide & Workbook! And McGRAW-HILL BOOK CO., long a leader in business publishing, offers many titles, including *Income Taxation: Accounting Methods and Periods, Tax Aspects of Buying and Selling* and *Financial Planning for the Utterly Confused.* **(GO MH)**

Online in the Mall's TaxTime database **(GO TAX)** you can also order many business publications. EBSCO MAGAZINE ENTREE **(GO ME)** offers titles such as *Money, Income Opportunities* and *Tax Hotline,* and DOW JONES **(GO DJ)** offers *The Wall Street Journal, Barron's* and *The National Business Employment Weekly.*

Financial Products

This year The Electronic Mall makes it easier than ever to shop for the financial products and services that can help you meet your financial goals. Many of the nation's leading financial institutions are at your command, ready to assist you. Here's a look at a few featured in the TaxTime database.

Colonial National Bank

Colonial National, a Delaware-based financial institution, offers you high interest income on your savings with Colonial's six IRAs, CDs, Jumbo CDs, and Great Rate Money Market rates. All fixed and variable interest rate IRA plans are insured by the FDIC for up to $100,000. You can open an account today for as little as $250! **(GO CN)**
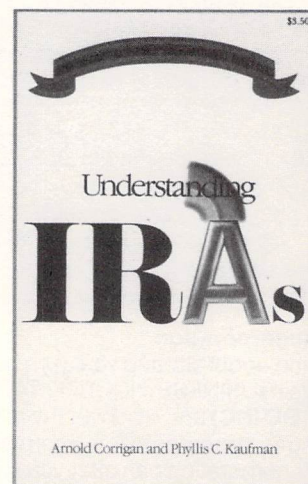
The Equitable

A unique feature of THE EQUITABLE's Mall Store is the IRA Tax Quiz. Online you can take a short quiz to find out how much you can save on your taxes with an IRA. Equitable also invites you to "Ask The Online Agent." Electronically you can ask questions about insurance, investment, retirement, and how the new tax laws affect you. The Equitable experts will respond to you personally through electronic mail! There are no obligations. **(GO EL)**

Dean Whitter Reynolds

As a full service brokerage firm. Dean Witter Reynolds offers many tax-related products that can help you save on taxes while maximizing earning potential. Municipal bonds, tax-free funds and tax-free zero coupon bonds are just some of the many products offered. To help you handle the new tax laws, two new sections have been added: Ways To Save on Income Taxes and Test Your IRA Know How. And, now that tax reform is here, Dean Witter offers *The Dean Witter Tax Reform Book.* Visit this Mall store and request your copy today! **(GO DWR)**

electronically yours,

Visit H&R Block

The world's largest tax preparation firm, H&R Block, prepared nearly 9.2 million U.S. tax returns in 1986. Block and its franchises operated 7,560 offices nationwide during the 1986 tax season. The company has a 31-year history of providing complete, quality tax assistance. H&R Block is offering a report entitled "Introduction to Tax Reform" and a Tax Forecaster service which tells you whether your federal taxes will go up or down after applying the 1987 laws to your 1986 income as well as assistance in preparing the new Form W-4 at your participating H&R Block offices. In selected cities, H&R Block is offering electronic filing of your tax return. To access this new and important information in The Electronic Mall, **(GO HRB)**.

Online Incorporation

Thinking about starting your own business? Visit BUSINESS INCORPORATING GUIDE **(GO INC)** and discover the many advantages of incorporation. Information on how incorporating can offer you substantial tax savings and limit your liability is offered online. At this innovative Mall merchant, you can actually apply for an incorporation application online. Several different packages, including sole proprietorship, partnership, limited partnership and corporation, are offered.

It's never too soon to start thinking about ways to cut your 1987 income taxes!

Order Tax Forms Online

Finally, after exploring the TaxTime database, you'll want to visit GREAT LAKES BUSINESS FORMS. At this business forms specialist you can order computer-fed forms compatible with most micro-computer accounting and payroll software packages. Two packages are featured, one for business, banking and financial and the other for personal tax preparation. Online you can also request a free tax form catalog. **(GO GL** for tax forms and many other business form supplies.

Max Ule Discount Brokerage

At Max Ule's Mall store you can request an IRA application. For your IRA choose from stocks, bonds, covered options, zero coupon bonds, mutual funds and more. Also featured at Max Ule is a full range of Fidelity Funds, including The Magellan Fund, The Equity Income Fund, the OTC Portfolio, and The Overseas Fund. **(GO MU)**

50 Ways to Say "I Love You"

Valentine's Day is February 14th! Now's the time to order gifts for everyone on your love list. At The Mall you'll discover gifts that are sentimental, presents sure to please, and some out-of-the-ordinary offerings! Browse a special order section featuring over 50 gifts! Select from *Hearts & Flowers, Seductive Suggestions* and *Cupid's Choice*. Here are just a few of the featured items **(GO VAL)**:
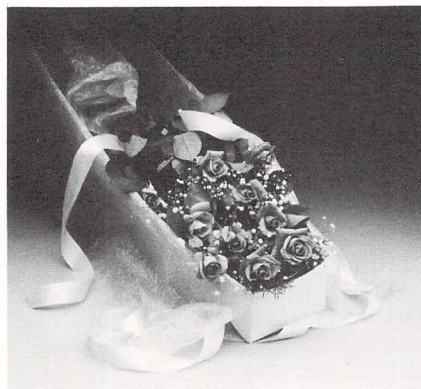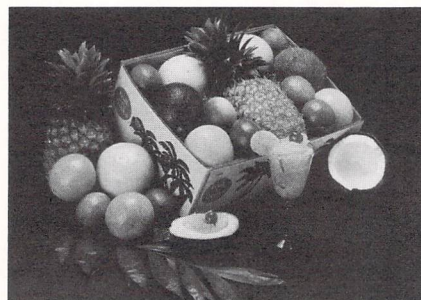
A Dozen Long Stem Red Roses
from Walter Knoll Florist **(GO WK)**

A "Be My Valentine" Basket
A beautiful basket brimming with chocolates, sweets, and tempting treats!
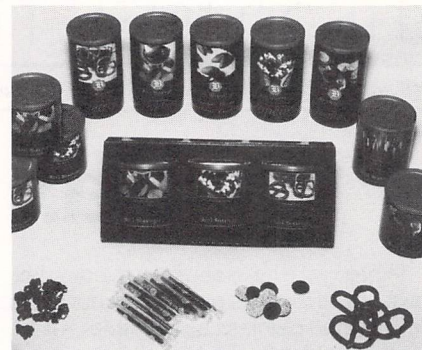from Lincoln Manor Baskets **(GO LM)**

Diva Perfume
from Neiman-Marcus **(GO NM)**

Silk Satin Cami and Tap Set
from Inside*Outside **(GO IO)**

Solid Walnut Necklace Chest
from Executive Engravers **(GO EX)**

The Tropical Luau
from Florida Fruit Shippers **(GO FFS)**

Chocolate Coverups
A unique assortment of chocolate-covered potato chips, popcorn and pretzels
from Simon David **(GO SIM)**

Silk Boxer Shorts
from Inside*Outside **(GO IO)**

The famous Hershey's Kiss mini-size necklace
from Milkins Jewelers **(GO MJ)**

A $25 Merle Norman Gift Certificate
from Merle Norman **(GO MN)**

Knotted Diamond Heart Necklace
from American Express **(GO AXM)**
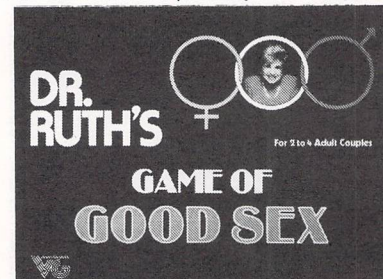
Dr. Ruth's Game of Good Sex
from TSR Hobby Shop **(GO TSR)**

Gone With the Wind Videotape
(Beta or VHS)
from Magic Castle Video **(GO MV)**

The Velocity of Love CD
from Express Music CD **(GO EMC)**

electronically yours,

Talk of the Mall

Well folks, the holidays are behind us now. If one of your New Year's resolutions was to take off those added pounds, trim those thighs or flatten that tummy, start by exercising your fingers at The Mall.

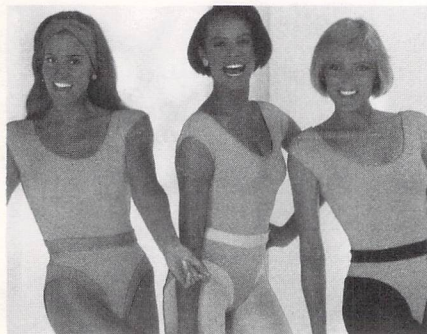**(H)Hanes**

L'eggs ActiveWear
Action-Tested For Your Comfort

Make your first stop the L'EGGS/HANES OUTLET where you can stock up on workout wear. Browse the online catalog for a wide selection of L'eggs ActiveWear, L'eggs tights, leotards and

aerobic pantyhose, and L'eggs warm-up suits. Also featured are hanes Sweats, Bali sports bras and socks galore! To work out in style. **(GO LH)**
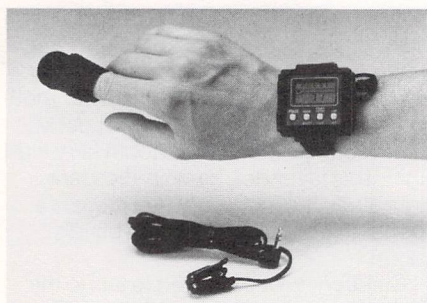
Next visit CAROLINA HEALTH & FITNESS where you'll find a selection of fitness accessories such as ertip pulse monitor, boisoft weights and a tune belt. (After all, what workout would be complete without music!) You'll also find in-home gym and health monitoring equipment, including a folding slant board, a

combination treadmill gym and a blood pressure monitor. **(GO HF)**

AMERICAN EXPRESS' Merchandise Shop also carries fitness equipment. Featured products include the Bally Life-cycle, The Pro Form™ 520 Rower, the Ultra Shaper Gym and the Vitamaster Treadmill. To order, **(GO AXM)**
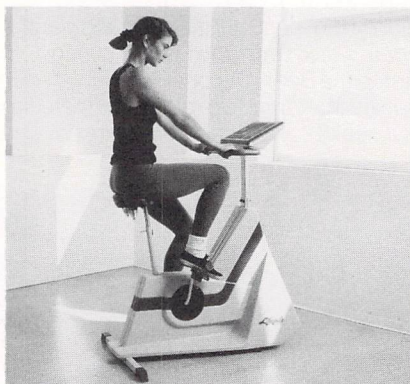
Finally, you'll find exercise videotapes at WALDENBOOKS **(GO WB)** and MAGIC CASTLE VIDEO **(GO MV)**.

Once you've dropped those holiday pounds, how about rewarding yourself with a week of R&R on the Riviera? See AIR FRANCE's selection of tours, including the Riviera FlexiPlan and The Monte Carlo Magnifique. You can request free brochures and borrow tapes from Air France's video library online. So start plotting your winter getaway today, **(GO AF)**

/// AIR FRANCE
Bring Some Razzle Dazzle to Your Online Sessions

Tired of text, text and more text streaming across your IBM PC or compatible screen? Get into graphics communications with NAPLPS graphics and Video-LogON communications software. You can transmit, receive and create state-of-the-art graphics with your personal computer. Check it out at VideoLog. **(GO VL)**

SEARS

Shop Sears' Inventory Clearance Sale

If Santa tucked some extra green-backs into your stocking this year, why not spend them at The Mall?

Start with the Sears Inventory Clearance Sale. Liquidated merchandise includes apparel, home fashions and more. Most items are priced 30 percent to 50 percent off, only while supplies last! **(GO SR)** and save!

bloomingdale's
BY MAIL LTD

Don't forget to browse Bloomingdale's selection of "Best Buys" for January, too! **(GO BL)**

Or be good to yourself and order something just for you! Visit WOOD-STOCK LEATHER **(GO BAG)** and browse the online catalog of quality leather products. Inquire about the custom ordering capability where all leather products can be handcrafted to your specifications!

Another merchant specializing in customized merchandise is EXECUTIVE ENGRAVER **(GO EX)**. Online you can order brass card cases, luggage tags, wine decanter sets, photo albums and more, all engraved! Their motto is this: "You name it, We can engrave it!"
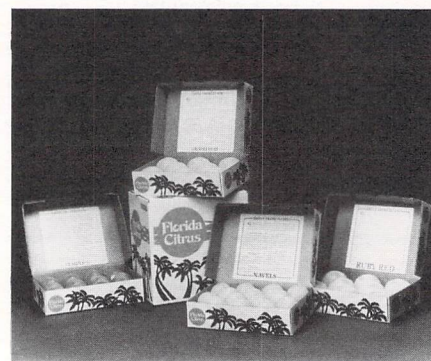
Sunshine for the Snowbound

Tired of winter? Why not order some Florida sunshine? FLORIDA FRUIT SHIPPERS **(GO FFS)** can warm up the coldest winter day with juicy, fresh, grove picked citrus. In season right now are Honeyball Tangelos, the luscious grapefruit-tangerine cross available through late January. Coming in February are Temple Oranges (Florida's finest!) and Honey Tangerines, the superstar of tangerines, sweet and easy to eat!

electronically yours,

Order Catalogs Electronically!

Don't forget that many Mall merchants offer you the opportunity to order print catalogs online!

SEARS, ROEBUCK AND CO. **(GO SR)** offers 19 free specialogs (specialty catalogs serving special needs) including *Big and Tall Men, Boating, Kitchen and Bath,* and *Recreational Vehicles and Camping.*

TIFFANY & CO. **(GO TIF)** features a free full-color catalog of fine jewelry and gift items. EXPRESS MUSIC CD **(GO EMC)** sells its catalog online, too. It's one of the most comprehensive music catalogs available and includes rock, jazz, blues, and classical listings. Most are available in LP, cassette or CDs. At SIMON DAVID **(GO SIM)**, the Dallas-based gourmet shop, you can order a full-color catalog of the finest in specialty meats, smoked meats, fresh fruits and gift ideas.

(GO HF) offers copies of its catalog online for free. WORLD OF COMPUTERS **(GO WOC)** has a free catalog with over 40 pages of computers, monitors, printers and accessories. ICON REVIEW, **(GO IR)** the Macintosh specialist, also offers a free catalog of computer merchandise. At MENU INTERNATIONAL **(GO MNU)** you can order extensive software catalogs for the Mac, Apple and IBM and you can request a free price list. And at the HEATH CO. you'll find two catalogs that are yours for the asking. **(GO HTH)**

Finally, remember that you can order seasonal catalogs online from two of America's leading retailers. BLOOMINGDALE'S **(GO BL)** and NEIMAN-MARCUS **(GO NM)**.

Toys That Make Learning Fun!

There is no greater investment in life than the investment you make in your child. New mall merchant QUALITOY believes that the toys you choose directly influence the quality of your child's playtime. In this spirit, Qualitoy has searched the world for a selection of special toys—toys worth the investment in your child!

Browse the online catalog for a selection of toys that will encourage curiosity, develop concepts, present alternatives and provide rewards. Among the items
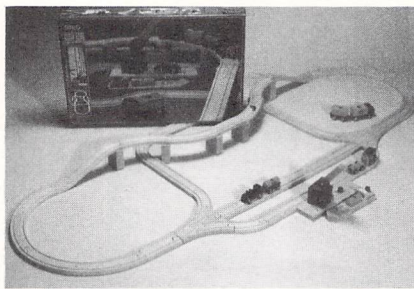
featured are Brio Wooden Trains, imported from Sweden. This deluxe train set, designed to encourage coordination, concentration and creativity, comes in a limited edition wooden storage box and includes an engine with three wagons, 16 curved tracks, ten straight tracks, two switching tracks, one crossing track, a viaduct and station building.

For infants and tots, Qualitoy offers products such as the Cradle Band. Imported from England, this colorful cradle toy is a feast for little eyes and ears! There's also Bathtime Fun, featuring Bruno the Bear. Or consider a large knob puzzle, handmade of birch and featuring vivid colors and a variety of animals.
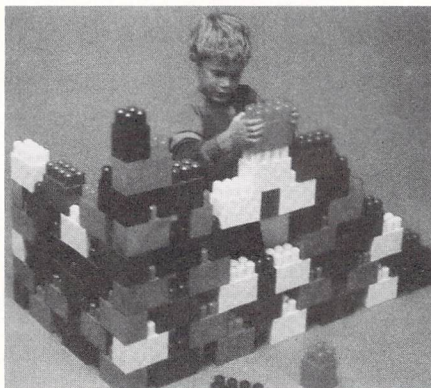
For older children, QualiToy offers games such as "Hare and Tortoise," a game of skill and strategy imported from Germany. Online you'll also find an assortment of wooden blocks and building materials, and arts and crafts items, including a deluxe adjustable oak easel and a real rotary printing press!

If your child is fascinated by dinosaurs, consider QualiToy's Dinosaur activity kit or a set of Glow-In-The-Dark Dinosaurs! For inquisitive young minds, consider Suitcase Science, a kit that puts young minds on the move with experiments utilizing basic principles of science. And for the musically inclined, there's a six-piece rhythm band!

For safe, durable, quality toys that encourage your child to grow, **(GO TY)**.

Tooth Fairyland Opens Online
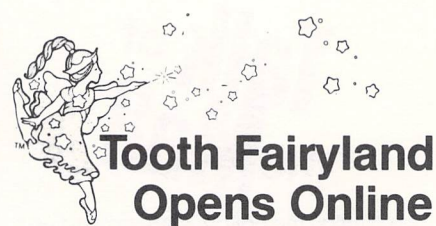
Remember the excitement at losing your first tooth and waiting for the tooth fairy to arrive?

Well, after thousands of years the legendary tooth fairy has found it necessary to open shop online! Yes, due to the millions of children and adults who practice the ritual of the tooth fairy, Tooth Fairyland has opened at The Mall!

Losing that first tooth is a magic moment that happens only once. Now you can make it last forever with a certificate documenting this exciting event! The Tooth Fairy Certificate, signed by the tooth fairy's helper Fred, is customized for your child and comes framed and ready to hang!
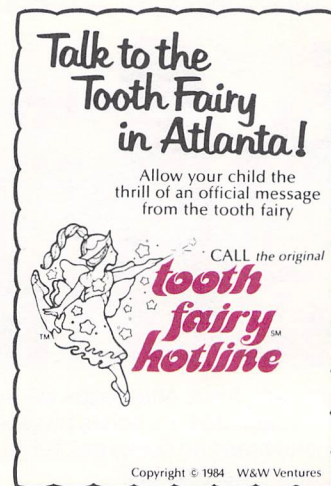
You can order the certificate individually, or you can order a complete *First Tooth Loss Gift Package.* In addition to the certificate, it includes an official Tooth Fairy T-shirt proclaiming "I Just Lost My First Tooth" and an official tooth fairy alert light. This lavender, glow-in-the-dark light alerts the tooth fairy that there is a lost tooth under the pillow in a child's room!

Children are also invited to talk to the tooth fairy electronically. When that first tooth begins to wobble, why not leave a message for the tooth fairy that you'll be expecting a visit soon?

For your own children, or for the children of clients and business associates, The Official Tooth Fairy Certificate or Gift Package makes a unique, long remembered gift! **(GO TF)**

electronically yours,

Attention Canadian Subscribers! IBM Canada Ltd. Opens Online!

Canadian subscribers are invited to visit IBM CANADA LTD. at The Mall. Many products and services are available online, and you have the opportunity to request detailed product information on:
- IBM PCs
- IBM printers
- IBM software
- Service for your IBM PC

Canadian subscribers can request a list of IBM Authorized Dealers and Resellers. US subscribers can call a toll-free 800 number for free literature on IBM PCs and service.
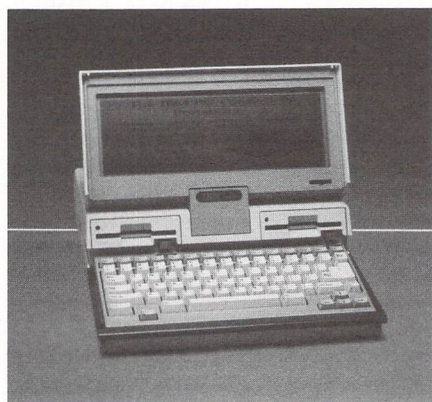
Among the PCs described online is the IBM 5140 PC Convertible, a light-weight, full-function PC, designed for professional applications and personal productivity in and away from the office. Also featured in IBM Canada's Mall store is the IBM Proprinter, a serial dot-matrix printer providing high-speed desktop printing for the IBM PC family.
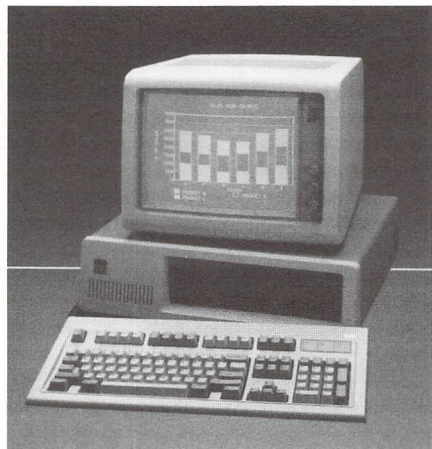
If you already own an IBM PC, you'll want to request a copy of the Directory of Personally Developed Software. It features 76 different packages, including business applications, education, entertainment and programming, many priced as low as $19.99!

Canadian subscribers, and their neighbors south of the border, are invited to **(GO IBM).**

Free Catalog from Crutchfield

For 13 years, the Crutchfield Catalog has been recognized as one of the most reliable nationwide sources for consumer electronics. Now you can request your FREE copy of this catalog online at The Mall. The catalog is 108 color pages filled with helpful articles, consumer tips, charts and installation guides, and complete descriptions of the latest name-brand car stereo, home stereo, video, telephone and security products. Crutchfield offers the finest products from Sony, Pioneer, Proton, Sherwood, Advent, Concord, Canon, Teac, Clarion, AR, EPI, and many more—all at low discount prices. Best of all, every product Crutchfield sells comes with the famous 30-day total satisfaction guarantee and toll-free access to Crutchfield's staff of expert technical personnel.
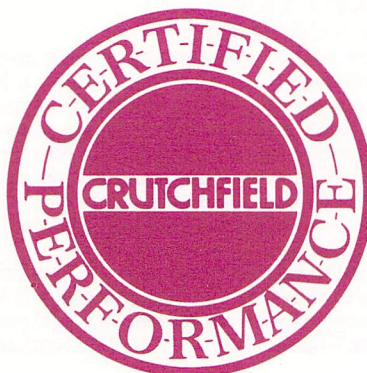
Browse the catalog to save 20 to 60 percent on in-dash cassette/receivers. Crutchfield carries Sony, Pioneer, JVC, Concord, Proton, Philips, Jensen and more! This merchant also offers over 340 professional installation kits custom designed for most cars. And if a car stereo or car security customer doesn't want to install his own system, Crutchfield will recommend a qualified installer in the customer's area through the Certified Installer Referral Service!

If you're in the market for a receiver, compact disc player, turntable or cassette deck, the Crutchfield catalog is the

Car Stereo, Audio/Video, Telephones
AT LOW DISCOUNT PRICES!
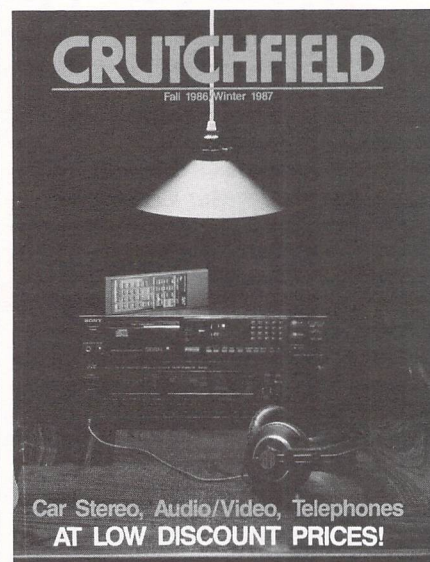
place to start. Audio products from JVC, Pioneer, Akai and more are featured. You'll find speakers from Infinity, Celestion, Design Acoustics, and more! There are VCRs and 8mm camcorders, truly something for every need and budget.

All orders received Sunday through Friday morning are shipped within 24 hours of receipt. And there is no charge for UPS shipment within the continental United States.

To step into the world of high-tech electronics, **(GO CFD)** today and request your FREE copy of the renowned Crutchfield catalog.

Luxurious Lingerie for Him and Her

At new Mall merchant INSIDE*OUTSIDE you'll discover luxurious lingerie perfect for Valentine's Day and everyday! Inside*Outside's extensive online catalog features a diverse selection of silk

and satin lingerie, imported loungewear, gifts and accessories.

For Valentine's Day this year why not surprise the lady in your life with the luxury of silk? Choose a silk jacquard kimono, a silk charmeuse nightshirt or a silk satin teddy. Or consider a silk cami and french brief set. This exquisite selection is imported by Christine Proenza in 100 percent silk charmeuse and is offered in ivory, black and pink.

Inside*Outside also carries a wide selection of flannel nightgowns to keep warm on a cold winter's night. A favorite is the 100 percent cotton flannel nightgown from Queen Anne's Lace. This delicate gown features pink lilies on a snowy white background and is trimmed with dainty lace. Also just right for fireside nights are Inside*Outside's Fantasy Factory Long Johns!

At Inside*Outside you'll also discover luxury items for him. For Valentine's Day, consider surprising him with silk striped boxer shorts, a silk kimono, or a black brief in 100 percent silk! Online you'll also find a men's terry velour robe and an assortment of accessories, including a silver-plated mustache brush!

To discover a cornucopia of luxuries for bed, breakfast and beyond, **(GO IO)**.

Look Good with Merle Norman

In 1931, during the great depression, the first Merle Norman studio was opened in Southern California. Since then, Merle Norman has grown into the largest chain of independently owned retail cosmetic studios in the world! Now, with a new Mall store, MERLE NORMAN puts the famous skin care and beauty products at the fingertips of women everywhere! Merle Norman offers only the finest products. All

Woman to Woman
MERLE NORMAN®

skin products are dermatologist tested and all eye products are ophthalmologist tested. And all carry a 100 percent money back satisfaction guarantee.

Merle Norman's extensive online catalog features everything you need to look and feel your best. First, because beauty isn't only skin deep anymore, you'll find a selection of vitamins, minerals, and supplements. Select the Complete Daily Packet Plan. A Program formulated especially for women, it provides 13 essential vitamins and 11 minerals. Or order a lá carte and select from multivitamins, calcium, anti-oxidals and other supplements.
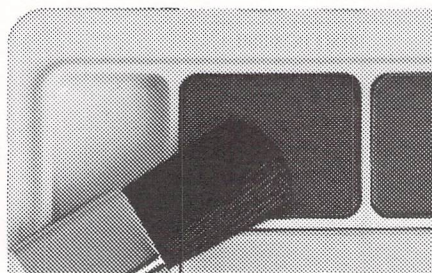
Long known as a specialist in skin care products. Merle Norman offers products for every skin type online. The products featured range from a special cleansing bar for the most sensitive skin to the famous Merle Norman deep cleanser "Miracol." You can plan a complete skin regimen by selecting from cleansers, toners, moisturizers and creams. An especially recommended line is the Luxiva Collection. Featuring collagen, a unique, non-oily cosmetic ingredient scientifically proven to effectively encourage moisture retention, these products can effectively minimize wrinkling and other effects of aging!

Makeup and Much More!

Merle Norman's online catalog features a selection of foundations and skin correctors. If you've got a specific beauty problem (a narrow face, a pointy chin, a wide forehead) Merle Norman Cosmetics Representatives encourage you to contact them electronically. They'll do their best to provide you with personalized makeup tips and tricks!

Powders, brushes, lip makeups and eye makeups are offered in a variety of styles and colors. A special service offered is Merle Norman's Color Matching Service. Specify the brands and shades you currently use, and Merle Norman will match them! Merle Norman's online catalog can truly provide you with a one stop source for all of your beauty needs!

Gifts for Valentine's Day Every Day

Finally, and especially appropriate for Valentine's Day, Merle Norman offers a selection of gift ideas including makeup brushes, fragrances, and bath care products. Always welcomed is a Merle Norman Gift Certificate, redeemable at any of the over one thousand Merle Norman studios, including their new Mall studio!

For health and beauty from the inside out, and for products covering you from head to toe, **(GO MN)** today.

Order Office Machines and Supplies Online

Welcome OFFICE MACHINES & SUPPLIES CO., a division of Gilson-Ayres, Inc., specialists serving the business community since 1946. This new Mall store puts a wide range of business products and services at your command. An authorized IBM sales and service dealer, Office Machines & Supplies also features a selection of products from manufacturers such as Royal, Olivetti, Sharp and Syntrex Word Processor.

Browse the online catalog for office and portable typewriters, computers, copiers, printers and calculators. You can also stock up on ribbons and supplies online for the IBM typewriter, IBM/Okidata printer, Adler/Royal typewriter and more! And, if you purchase (or already own) an IBM Selectric typewriter, an Adler/Royal Typewriter or an Olivetti typewriter, you can request repair and maintenance services online, too!

Free Catalog, Warranty Guarantees and a Special Introductory Offer!

Online you can also request a free print catalog chock full of machines and supplies. Best of all, everything featured in the print catalog can also be ordered electronically!

And every machine ordered at Office Machines & Supplies carries a 90 day warranty against manufacturing defects for parts and labor. If, for any reason, your machine fails to function, contact Office Machine & Supplies electronically for warranty procedures.

Finally, as their way of welcoming you to their new Mall store, Office Machines & Supplies is offering an additional 10 percent off the already competitive prices on your first order!

To visit Office Machines & Supplies Co. today, **(GO OM)**.

electronically yours,

Get Mall News Every Week!

Don't forget that *This Week's Mall News,* located on the top Mall menu, features news updates about The Mall every week. **GO EMN** to find out about new stores, merchandise updates, special sales and Mall events.

The Winners' Circle

Congratulations to the over 300 CompuServe subscribers who won valuable prizes in Your Numbers Up!, The Mall's fall promotion.

Subscriber Robert Feinken wrote us about the contest, "I want to thank The Electronic Mall™ and the Heath Company for the Hero Jr. Robot. This was the first time I had ever won anything. It was fun building the robot and a lot easier than I thought it would be. It was also very interesting to participate in a contest over the computer. Thanks again."

Another winner, David Whiteman of New York City wrote, "I would like to thank CompuServe and The Mall for sponsoring this nutty event. Keep up the good work!"

Among the prizes donated for the contest were a Casio keyboard from Music Alley Online, "Be My Guest®" Gift certificates from American Express, Redi-hand vacuums from Vacuum Advance, online gift certificates from Sunland Camera, Disney Videos from Magic Castle Video and $12.50 usage credits from Compu-Serve.

Watch for more Electronic Mall™ contests in the months ahead!

AT&T's Search Contest

AT&T is pleased to announce the first winners in the new monthly Search Contest. Tim Brake and Bret Savage, both of North Carolina, each won $25 AT&T Long Distance Gift Certificates for being the first and second persons to correctly solve a series of online clues. When notified of this win, Tim wrote a letter via EasyPlex to AT&T, "I really liked your store and I thought that your Search (contest) was a fun challenge. Keep up the good work."

Every month there is a new contest in the AT&T Search database, with new prizes for you to win.

For details, and to enter this month's contest, **GO ATT.**
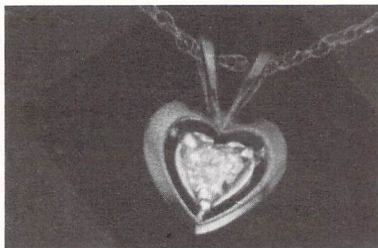
Announcing American Express' Valentine Quiz

Beginning February 1, AMERICAN EXPRESS will be sponsoring a special Valentine Quiz. Users will be asked to correctly identify three famous couples. The first 99 subscribers to do so will win a solid brass picture frame (for two pictures!). And the 100th person to correctly identify all three couples will win the grand prize, the Gucci 2000 watch for him and the Heart of Hearts Diamond necklace for her!

For complete rules and regulations, and for your chance to win, **GO AXM** beginning February 1.

The Electronic Mail Box

Many Mall merchants feature a special "Talk To Us" section. They want to hear from you! Write to them electronically with your compliments, complaints and comments. Ask them a question about their product or service and they'll write back, electronically of course! Here's just a sample of some of your electronic letters:

Dear Coffee Emporium:

Just a note to let you know how much I enjoyed the coffee Sampler #2 that I ordered a few weeks ago! I have always been a coffee lover but never knew how much. I live just outside of Houston and it seems this city is lacking in a good place to buy fresh coffee. I am so glad to have found you!
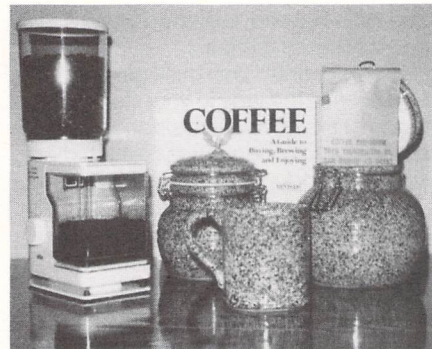
Sincerely,
Cheryl H.
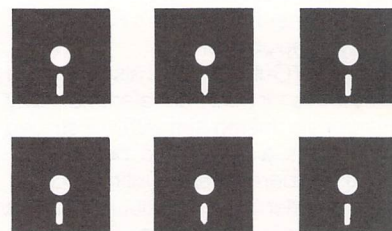
Dear Software Discounters:

Thank you for your response and the special attention you have given my order. Although I know that if I shop around locally I can find the products I buy from you, it is always a pleasure for me to do business with your company. Aside from the price. I appreciate the service, and as I have discovered in the past, if I have any software problems I know that they will be rectified. Once again, thanks.

Allan S.
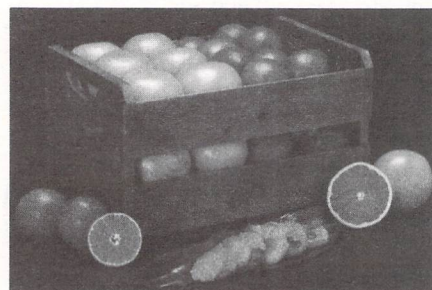
Dear Florida Fruit Shipper:

I received my order of fruit from you today. Just wanted you to know that this is the *best* fruit I have ever received. The oranges and grapefruits are sugar sweet! You will be receiving another order from me in the near future.

Thank you,
Russ H.

electronically yours,
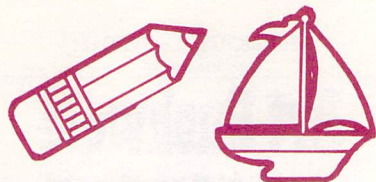
Toys and More!

HOBBY CENTER TOYS, one of the Midwest's leading sources of exciting hobby items, model trains, unusual toys and games, now brings over 40 years of experience, service and selection to The Mall. Hobby Center's online catalog offers something for all ages – dolls, stuffed animals, model kits and much more!

For infants, consider a teddy bear. You can choose from three: Steiffs' original teddy bear; Smarty Bear (an electronic interactive talk-a-tronic toy); and Talking Bingo Bear, a bear with a vocabulary of over 400 words!

For pre-schoolers, there's a Timex® Teach Me™ watch from Playskool and Etch-A-Sketch Animator. Kids of all ages will enjoy the Giant Ant Farm or the Super Magic Show, a kit featuring over 150 different tricks!

For budding Einsteins and Edisons, see Hobby Center's science department. Select from a microscope set, a Power Tech physics kit, a Power Tech Solar Energy Kit, a Jr. Astronomer Planetarium and much more.

Hobbyists will delight in Hobby Center's selection of model railroads, model kits and radio control vehicles. Select The Lionel Nickel Plate Special Train Set. It includes a locomotive engine that puffs real smoke! Choose from model kits for everything from a 1957 Chevy Coupe to The Budweiser Clydesdale eight-horse hitch to the USS Constitution Wooden Ship. And enthusiasts of remote control vehicles will discover boats, dune buggies, submarines and rockets, all at their command.

For toys for all ages, **GO HC.**

The Electronic Showroom

Don't forget that three of the nation's leading car manufacturers now have electronic showrooms open at The Mall. Now's the time to pay a visit and take a look at the new 1987 car and truck lines!
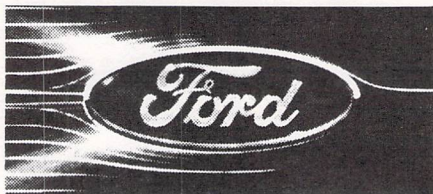
Take a trip to Buick Magazine **(GO BU)**, Chevy Showroom **(GO CHV)** and Ford Motor Company **(GO FMC).**

discoveries!

We've scoured The Mall and gathered an eclectic selection of unusual or little known Mall merchandise. Browse our list of Discoveries! We think you'll agree that you can get most anything at all at The Electronic Mall.™

Sony Message System
from AMERICAN EXPRESS **(GO AXM)**

Jane Fonda Aerobic Workout Tape
Available in Beta or VHS
from WALDENBOOKS **(GO WB)**

Warm Feet foot powder!
Prevent cold feet and freezing toes with this amazing foot powder! Warms feet naturally by helping to maintain good circulation.
from CAROLINA HEALTH & FITNESS **(GO HF)**

Backyard Birdwatching Kit
from CAROLINA HEALTH & FITNESS **(GO HF)**
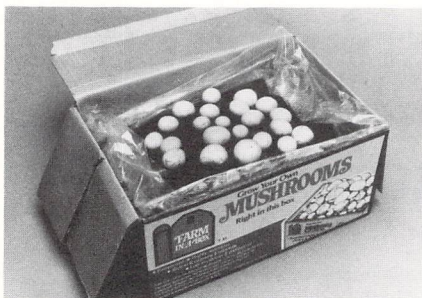
An Edible Mushroom Farm
from CAROLINA HEALTH & FITNESS **(GO HF)**

America's Cup Software
from SOFTWARE DISCOUNTERS OF AMERICA **(GO SDA)**

Flavored Decaffinated Coffees —
Choose from Amaretto, Vanilla, Irish Cream, Chocolate Almond, Chocolate Mint and Nut Cream
from COFFEE EMPORIUM **(GO COF)**

Unsalted Macadamia Nut Pack
from HAWAIIAN ISLE **(GO HI)**

Ziggy Doll with Nightshirt
from SEARS, ROEBUCK AND CO.
(GO SR)

Point of Attack; A Season with the New York Giants
from McGRAW-HILL BOOK CO.
(GO MH)

Hoops! The Official National Basketball Players Association Guide to Playing Basketball
from McGRAW-HILL BOOK CO.
(GO MH)

The Stork's New Baby Basket — The perfect present to welcome the new baby — a custom basket brimming with things for the newborn.
from LINCOLN MANOR BASKETS
(GO LM)

Sony Watchman
from AMERICAN EXPRESS **(GO AXM)**

"HILARIOUS...I LOVED IT!"
Ann Landers
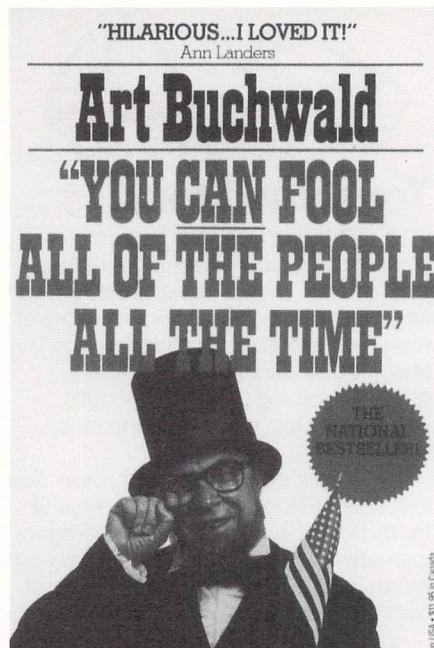
You Can Fool All of the People All of the Time
Humor by Art Buchwald
from BALLANTINE BOOKS **(GO BAL)**

Add-an-Outlet Installation Kit
Contains everything you need to install up to three modular jacks!
from AT&T **(GO ATT)**

The AT&T Telephone Book
Complete, illustrated guide to installing home telephones and accessories
from AT&T **(GO ATT)**
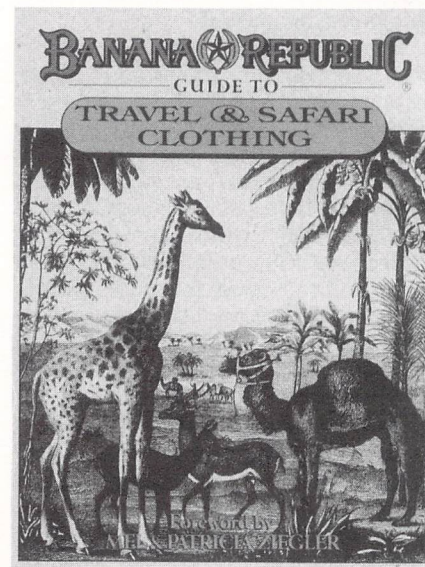
Banana Republic Guide to Travel & Safari Clothing
from BALLANTINE BOOKS **(GO BAL)**

discoveries!

Polaroid SPECTRA Camera
If you need instant photos of a party, product or person, the Spectra is the camera for you!
from SUNLAND CAMERA **(GO SUN)**

Nintendo Entertainment System
from AMERICAN EXPRESS **(GO AXM)**
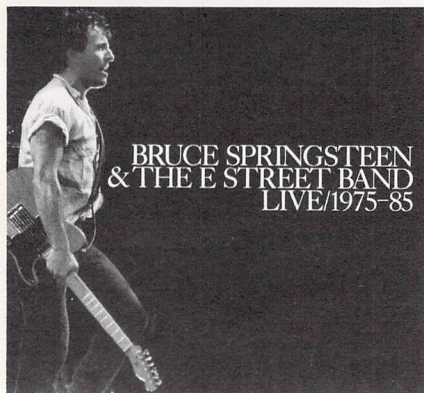
Bruce Springsteen Live 1975-1985
The New three-CD Set!
from EXPRESS MUSIC CDs **(GO EMC)**
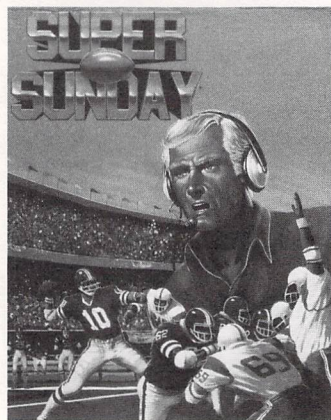
Super Sunday Software
by Avalon Hill
from SOFTWARE DISCOUNTERS OF AMERICA **(GO SDA)**

Solid Brass 30X Hand Telescope
from COSMIC CONCEPTS **(GO CC)**
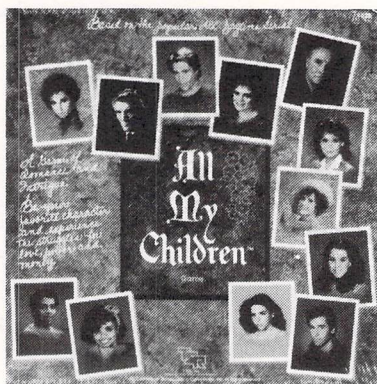
All My Children Game
from TSR HOBBY SHOP **(GO TSR)**

Full-grain Leather Travel Kit
Available in black, brown, burgundy, grey and tan
from WOODSTOCK LEATHER **(GO BAG)**

Cooking Alaskan
The most complete collection of Alaskan recipes ever assembled!
from ALASKA TELESHOPPER **(GO AK)**
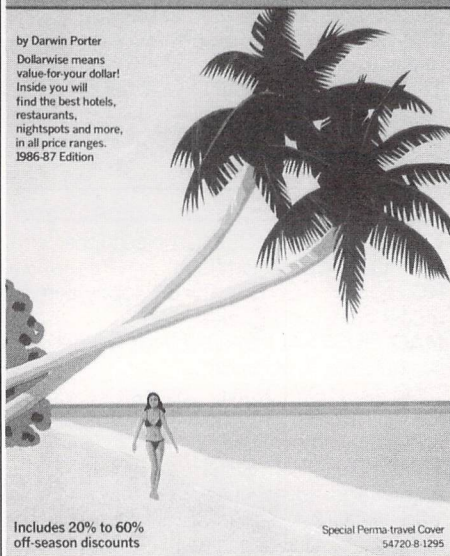
Frommer's Dollar Wise Caribbean from WALDENBOOKS **(GO WB)**

The Red Fox, the bestseller by Compu-Serve subscriber Anthony Hyde! from BALLANTINE BOOKS **(GO BAL)**

The Sewing Machine of The Century!
The Computer Equipped SX2122
from VACUUM ADVANCE **(GO VCS)**

A Bikini For Every Day of the Week!
Seven beautiful 100% silk knit, string bikinis!
from INSIDE*OUTSIDE **(GO IO)**

The Neiman-Marcus 24-kt. Gold-plated Toothbrush
from NEIMAN-MARCUS **(GO NM)**

For January Birthdays…A Heart Shaped Garnet Ring
from MILKINS JEWELERS **(GO MJ)**

For February Birthdays…A Fantasy Cut Amethyst Ring
from MILKINS JEWELERS **(GO MJ)**
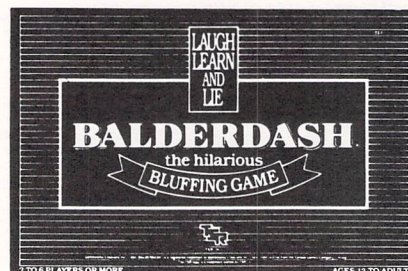
Balderdash®
The hilarious game of bluffing that has taken Canada by storm!
from TSR HOBBY SHOP **(GO TSR)**

Marymac Industries, an authorized Radio Shack Sales Center, now offers at substantial discount Radio Shack's Transportable Cellular Phone. Radio Shack's mobile cellular phone is truly transportable. For safety and convenience it goes where you go — your car, office, home, or even poolside. And, because Marymac is an authorized Radio Shack dealership, the warranty accompanying your order will of course, be honored at any of the thousands of Radio Shack stores nationwide. MARY-MAC INDUSTRIES **(GO MM)**

electronically yours,

The Electronic Mall Directory

Apparel/Accessories

CA CASUAL TEE'S: Personalized shirts, caps and trophy plaques
IO INSIDE*OUTSIDE: Lingerie, apparel and gifts
LH L'EGGS/HANES OUTLET: Brand-name apparel for men and women
MJ MILKINS JEWELERS: Jewelry, watches, and silver
BAG WOODSTOCK LEATHER COMPANY: Handcrafted leather products

Auto

BU BUICK MAGAZINE: Car information, customer service
CHV CHEVY SHOWROOM: Car and truck info, swap meet
FMC FORD MOTOR COMPANY: Car and truck information, dealer locator

Books

BAL BALLANTINE BOOKS: Current bestsellers, great gifts and more
MH MCGRAW-HILL BOOK CO.: Full line of books
MER MERCURY HOUSE: Fiction and nonfiction books
WB WALDENBOOKS: Full line of books, audiotapes, videos

Computing

CE COMPUTER EXPRESS: Apple, IBM, Commodore software
CL CONROY-LaPOINTE: Hardware, software and diskettes
GL GREAT LAKES BUSINESS FORMS: Forms and computer paper
HMK HALLMARK COLOR MAIL: Software for electronic greetings
HTH HEATH COMPANY: Build-it-yourself kits
IBM IBM CANADA LTD.: Info on IBM products for Canadians
IR ICON REVIEW: Macintosh software, hardware, and accessories
IS INVESTMENT SOFTWARE: Financial software for IBM PC
MM MARYMAC INDUSTRIES INC.: Official Radio Shack dealer
MNU MENU INTERNATIONAL: Software info and ordering service
MO MISCO COMPUTER SUPPLIES: Computer supplies and accessories
SR SEARS ROEBUCK AND COMPANY: Computer hardware and software
SDA SOFTWARE DISCOUNTERS OF AMERICA: Software for a range of personal computers, club
WOC WORLD OF COMPUTERS: Hardware, printers and accessories

Financial

BNB BENEFICIAL NATIONAL BANK USA: VISA and MasterCard
INC BUSINESS INCORPORATING GUIDE: Nationwide incorporating
CN COLONIAL NATIONAL BANK USA: Gold MasterCard information
DWR DEAN WITTER REYNOLDS: Investment and money management
EL EQUITABLE LIFE: IRAs, Keoghs, annuities, insurance
MU MAX ULE DISCOUNT BROKERAGE: Brokerage and financial information
SLG SUN LIFE GROUP: Certificates of annuities

Gifts/Gourmet

AK ALASKA TELESHOPPER: Unique items from the Last Frontier
COF COFFEE EMPORIUM: Gourmet coffees and teas
EX EXECUTIVE ENGRAVER: Engraved gifts and rubber stamps
FTH FIFTH AVENUE SHOPPER: Flowers, fruits and books
FFS FLORIDA FRUIT SHIPPERS: Citrus and tropical fruits
HI HAWAIIAN ISLE: Hawaiian wear, food, fragrances, and more
HH HOBBIT HOLE/WYANDOTTE WINES: Gourmet foods and gifts
LM LINCOLN MANOR GIFT BASKETS: Unique and creative gift baskets
SIM SIMON DAVID: Gourmet foods, meats from Texas
TF TOOTH FAIRYLAND: Tooth loss memorabilia
WK WALTER KNOLL FLORIST: Plants, flowers, fruits and balloons

Home/Leisure

CC COSMIC CONCEPTS: Telescopes, binoculars, optics, kids' stuff
HC HOBBY CENTER TOYS: Hobby items, model trains and games
MAO MUSIC ALLEY ONLINE: Guitars, synthesizers, keyboards
TY QUALITOY: Quality children's toys
RR RIN ROBYN POOL & PATIO: Pool and patio, outdoor items
TSR TSR HOBBY SHOP: Adventure games and accessories
VCS VACUUM ADVANCE: Vacuum cleaners, sewing machines

Merchandise/Electronics

AA AMERICAN AIRLINES CATALOG: Unique travel-related merchandise
ATT AT&T: Contest, programs, products and services
ORD COMPUSERVE STORE: Variety of CompuServe products
CFD CRUTCHFIELD: Catalogs of car and home electronics

NCS NATIONWIDE CATALOG SHOPPER: Hundreds of catalogs
OM OFFICE MACHINES & SUPPLIES: Office equipment and accessories
SR SEARS ROEBUCK AND COMPANY: Electronics, toys, general
SUN SUNLAND CAMERA: Cameras, lenses, video, and more
XDM XEROX DIRECT MARKETING: Product information, discounts

Online Services

GLO GLOBALINK: Translation, interpreting, culture information
EF EF HUTTON: HuttonLine signup, online investment services
NN NEWSNET: Online news service signup
OA OFFICIAL AIRLINE GUIDES: Information on OAG's online service
VL VIDEOLOG: Electronic components search service

Periodicals

CW CW COMMUNICATIONS: Computer World and other magazines
DJ DOW JONES & CO.: Business and financial publications
ME EBSCO MAGAZINE ENTREE: Full line of magazines
ECO ECOPRESS: Business training publications
US USA TODAY: Daily newspaper subscription

Premium Merchants

AXM AMERICAN EXPRESS: Fitness items, electronics and gifts
BL BLOOMINGDALE'S BY MAIL: Fashion, furnishings catalog
NM NEIMAN-MARCUS: Fine quality, distinctive merchandise,
TIF TIFFANY & CO.: Catalogs, credit card application

Records/Movies

CF CBS/FOX VIDEO: Information on latest releases
EMC EXPRESS MUSIC CDs: Rock, jazz, classical, country
MV MAGIC CASTLE VIDEO: Family oriented videotapes, discs
RC RCA DIRECT MARKETING: Club signups and compact discs

Health/Beauty

HF CAROLINA HEALTH & FITNESS: Exercise equipment, health
MN MERLE NORMAN COSMETICS: Makeup and Skin Care Products
VM VITAMENAGERIE DISCOUNT VITAMINS: Vitamins/Minerals

Travel

AF AIR FRANCE: Tour booking, information on sights/scenes
AT AMEROPA TRAVEL: Reservation info, charter flights

Access hundreds of online reference sources from your home, office, home-office or Home Office.

With IQuest — CompuServe's research annex featuring over 700 publications, databases and indices.

No matter when or where your need for information occurs, IQuest accommodates. Access the leading databases of: DIALOG, Bibliographic Retrieval Service (BRS), NEWSNET, Pergamon INFOLINE (European), QUESTEL (French), Datasolve (British), and VU/TEXT (U.S. — Regional Newspapers). From school book reports to Wall Street corporate acquisitions, IQuest takes online searching out of the minds of information scientists and returns it to the hands of information consumers.

A common place to look for not-so-commonplace reference resources.

IQuest taps electronic magazines, newsletters and databases that span the worlds of business and commerce, government and politics, research and development, advertising and marketing, news and analysis — even popular entertainment, sports and lifestyle publications. Consult a complete alphabetized index online — GO IQUEST.

Information as you like it: bibliographic, abstracted, full-text.

All IQuest databases include bibliographic references. Scholarly abstracts accompany hundreds of others. And you can retrieve full-text for over 250 more. Canvass hundreds of thousands of pages of data. Pinpoint the very information that makes a case, solves a problem, or broadens input on a complex issue. Eliminate long hours of library research. Avoid frustrating blind alleys. Reclaim time to evaluate what you recover.

No learning curve. Learn to use IQuest straightaway.

With a few, simple menu-supported steps you can perform a search on any one of the hundreds of databases IQuest encompasses. You provide keywords that describe what you're looking for. Then you just watch. IQuest selects an appropriate database (unless you indicated one). It automatically translates your search terms into commands recognized by the selected database. It logs you on, performs the search, logs you off and returns the results.

Tackle electronic research with a FREE printed guide.

For more information about IQuest, request CompuServe's FREE 8-page guide to the service online. It includes command summaries, search tips and a comprehensive database index. To order, GO IQUEST at any ! prompt and select "More Information About IQuest" from that menu listing.

Want to write and reason more authoritatively? Want to instill more confidence in your decisions? Discover IQuest on CompuServe. It's reference with a difference!

IQuest℠

Look for special savings on selected databases each month.

IQuest Offers Way to Track Soviet News

You now can obtain Soviet news as reported by the Soviet news agency firsthand from the TASS database, accessible through CompuServe's IQuest service.

If you're concerned about nuances in Western news coverage of such major events as the Chernobyl catastrophe or just interested in the Soviets' perceptions of world happenings, IQuest makes it easy to go directly to the source of Soviet news — TASS. The TASS database covers statements by Soviet leaders, important official Soviet documents, international and domestic politics, diplomacy, economics, trade, culture, science, sports and nature. The database offers TASS newswires in English, dating from November 1985.

As with all databases accessible through IQuest, no special steps are required to search the TASS database. Thousands of TASS newswires are just a few commands away. TASS is available through Datasolve's World Reporter Service, all of which is available in IQuest.

To begin a search, type GO IQUEST at any CompuServe prompt. You can choose to read search tips from the displayed menu. A few minutes spent reading these tips can help you shape a search strategy that will save time and effort.

Once you feel comfortable with IQuest's commands, choose option 2, "IQuest-II: You pick database." Type TASS at the IQuest prompt, "Please enter the vendor or database as you know it (use B to back up)." "Use B to back up" means to type B to return to the previous menu.

Next, IQuest prompts you for keywords to target your topic search. Remember, the more specific the keywords, the more effective and prompt IQuest's response will be. For example, for stories about the latest summit between the United States and the Soviet Union, typing the keyword SUMMIT would yield more than 1,500 articles; typing SUMMIT AND UNITED STATES would yield less than 300 articles.

The use of one or two "logical operators," such as AND and OR, with keywords can narrow a search. Typing "SUMMIT *AND* UNITED STATES *AND* SOVIET UNION" tells IQuest to find only those articles that mention all three terms. Conversely, entering "SUMMIT *OR* UNITED STATES *OR* SOVIET UNION" results in IQuest finding articles that contain any one or all of the keywords.

Another helpful search tool is the forward slash (/), which, when entered at the end of a keyword, will find any article containing the keyword whether it appears by itself or as part of another word. For example, typing TAX/ will retrieve articles containing "tax," "taxes" and "taxation."

IQuest takes the keywords you've provided, accesses the TASS database, and retrieves articles meeting your search criteria. A series of messages will note IQuest's progress concluding with the message, "Search completed."

Next, IQuest tells you the number of articles it found that satisfied your search criteria, followed by headings for up to 15 of the most recent articles. You can choose to display the full text of one article at no additional cost beyond the surcharge for initiating the search.

To keep track of your tab for searches, IQuest periodically displays the total charges you have accrued. (Remember that the total does not include your connect time charges or any applicable communications surcharges.)

If you encounter difficulties in conducting a search, real-time help is available by typing SOS at nearly any IQuest prompt.

Once you have reviewed the 15 headings or text of one article, you can choose to review the headings or text again, review additional headings (if available), review the full text of another article, exit IQuest or begin a new search.

— *Matthew Burns*

What's Going On???

If you want to know what's going on around CompuServe, check into the *Electronic Edition* of *Online Today*. Here you'll find constantly revised news for and about the CompuServe community. GO OLT from any prompt and choose "CompuServe Update" from the main menu.

ONLINE
T O D A Y

U P D A T E

NEW PRODUCTS

USEN Changes Name to IEN

The US Entrepreneurs' Network has changed its name to the International Entrepreneurs' Network.

With the increase in businesses importing and exporting goods and CompuServe's expansion in international markets, the Entrepreneurs' Network will continue to assist small business owners everywhere.

Although the forum has a new name, the GO command has not changed. GO USEN

Gamer Magazine Adds Section

The Electronic Gamer online magazine has added a section about Infocom games. Infocom, based in Cambridge, Mass., is a major developer of microcomputer software games. The new section titled ''Infocom's Status onLine,'' includes excerpts from the game company's quarterly newsletter ''The Status Line.''

Information in the Infocom section will be available online several weeks before the print publication is mailed to readers. One subject area, titled ''Late-Breaking News,'' will include news releases from Infocom's public relations department. GO TEG

Borland Forum Reorganized

The Borland International Forum has expanded into two separate forums to provide support for all Borland software products as they are announced.

The Borland Programming Languages Forum will be the forum for such renowned products as Turbo Prolog and Turbo Pascal. The Borland Applications Forum is dedicated exclusively to the discussion of Borland's business application products such as SideKick, SuperKey, Turbo Lightning and Reflex.

Type GO BOR100 for the Borland Programming Languages Forum; GO BOR200 for the Borland Applications Forum; and BOR for the Borland company newsletter.

EMI Surcharges Revised

The surcharge schedule for EMI Flight Plans has changed. The flight plan surcharge is $.013 per nautical mile planned, with a minimum surcharge per plan of $1 and a maximum (including Pro-Plan surcharge) of $6. With the new rates a 250-nm plan with weather briefing costs only $3.25 and a 1,500-nm plan costs $6. Surcharges of other EMI aviation services remain unchanged.

Make and model aircraft performance data for many turbine aircraft are being added to the aircraft database for use in the Pro-Plan Option. Pro-Plan adds to the convenience and value of each EMI flight plan, with stored performance data and extra features such as ground speed, temperature and winds aloft for each cruise leg. Pilot-directed Profile Optimization also is available to users of Pro-Plan. GO EMI-18.

Astronomy Forum Available

The Astronomy Forum is now available on the CompuServe Information Service for amateur and professional astronomers.

The Astronomy Forum will offer public domain software for astronomers and provide reference articles on astronomy topics. The forum will assist national and international astronomy organizations in promoting conventions and other special events. GO ASTROFORUM

Ashton-Tate Adds Products

Ashton-Tate has announced dBASE Mac, an advanced relational database management system combining the power of Ashton-Tate's dBASE products with the presentation capabilities of the Macintosh personal computer.

The new product will be supported by the technicians of the Ashton-Tate Forum. To learn more about this product and its capabilities, address questions to Kent Irwin (sysop) in the Ashton-Tate Forum. GO ASHFORUM

Software Publishing Forum Expands

The Software Publishing Forum has added two subtopics in conjunction with the announcement of the Harvard Total Project Manager and Harvard Presentation Graphics. Subscribers can get online product support from Software Publishing in these subtopics.

Software Publishing has announced a new desktop publishing product, Clickart Personal Publisher. Designed for MS-DOS compatible computers, this software provides the ''What you see is what you print'' capability. GO SPC, GO SPCFORUM

CB Club Offers Special Prices

CompuServe subscribers who use the CB Simulator now can decide what their standard time hourly rates on CB will be. For a monthly club fee you can use CB for as little as $1 per hour, even at 1200-baud.

Two CB Club rate plans are available. For a monthly club fee of $25, you can have a standard time hourly rate in CB of $4 per hour. For a monthly club fee of $100, you can have a standard time hourly rate in CB of $1 per hour. Communications surcharges still apply. GO CBCLUB
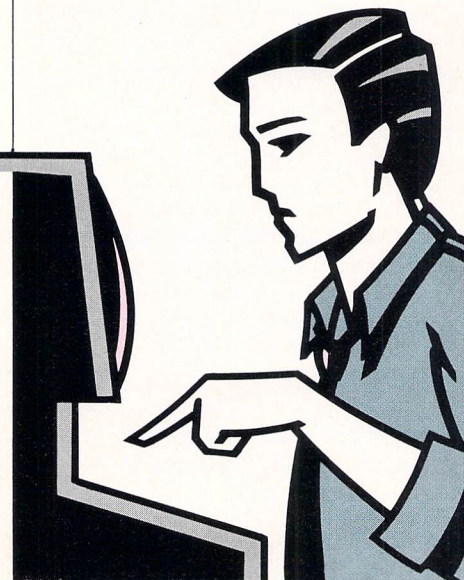
CSC Network Access Explained

CompuServe subscribers from select international locations now can directly access the CompuServe Information Service through the Computer Science Corp. network.

Access to CompuServe through CSC does not require any special arrangements with the international host country. For a surcharge of $20 per prime or standard connect hour, subscribers can dial a direct access number to log on to the Information Service. Applicable communication surcharges for using the CSC network will be added to your other CompuServe charges and sent to you through your current CompuServe billing method. Initially, the determination of time for billing purposes for access through CSC will be based on Eastern Daylight time.

To find the access telephone numbers for the countries and cities in which the CSC network is available, type GO CSCNET at any prompt on the CompuServe Information Service. An easy-to-follow CSC log-on procedure is available online by typing GO LOGON.

PEOPLEXPRESS Reservations Added

CompuServe subscribers now can make online reservations for PEOPLEXPRESS flights through Travelshopper. Travelshopper lets subscribers look up airline schedules and fares for any airline worldwide. You can make reservations online and get your ticket through your travel agent, the airline or several other ticketing options.

To make online reservations, you must first enroll in Travelshopper. There are no membership fees or costs involved; just complete the application online. As a new member you will receive 3,000 extra bonus miles to help you get started in TWA's Frequent Flight Bonus program. GO TWA
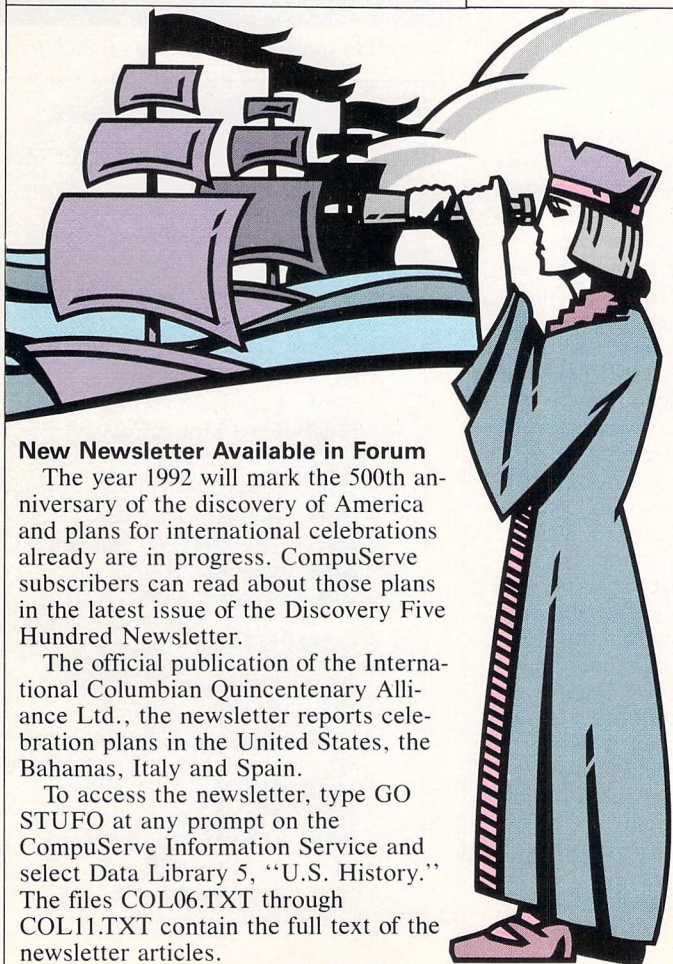
New Newsletter Available in Forum

The year 1992 will mark the 500th anniversary of the discovery of America and plans for international celebrations already are in progress. CompuServe subscribers can read about those plans in the latest issue of the Discovery Five Hundred Newsletter.

The official publication of the International Columbian Quincentenary Alliance Ltd., the newsletter reports celebration plans in the United States, the Bahamas, Italy and Spain.

To access the newsletter, type GO STUFO at any prompt on the CompuServe Information Service and select Data Library 5, ''U.S. History.'' The files COL06.TXT through COL11.TXT contain the full text of the newsletter articles.

Drive it out of Ford's electronic showroom: *Ford Aerostar accommodates everyone*

Take off in today's Chevy: *Chevy is built for road trip*

Cruise to The Mall for New Car Values

In the market for a new car? The Electronic Mall makes car shopping easy: Buick, Chevy and Ford have opened electronic showrooms. Visit all three to see what is new in cars and trucks for 1987 and to request free product brochures.

At Buick Motor Co. you will discover the "Buick difference" online. Each week a new line of Buicks is highlighted electronically. Online information includes standard and available features and the manufacturer's suggested retail prices. Buick also offers online driving tips, news on motor sports events and the Motor Sports Merchandise Shop. When you stop by and complete a questionnaire, you will receive a free gift from Buick. GO BU

Visit The Chevy Showroom online to see Chevy's model lineup and take advantage of the vehicle recommendation service. When you answer a series of questions, Chevy will recommend a passenger car or truck to meet your needs and budget. At Chevy you also can order free ($3 to cover shipping and handling) Chevy Tech software, a package that allows microcomputer owners to select vehicles, choose options, determine pricing and calculate financing at home. Also featured online are Chevy Motor

Sports Information and Chevy Swap Meet, an innovative service that allows subscribers to swap parts and information with other Chevy owners. GO CHV

Ford Motor Co.'s electronic showroom features the Ford product lineup including LTD/Crown Victoria, Taurus, Tempo, Escort, Mustang, Thunderbird, Ranger, Bronco II, Aerostar and the F-series pick-up. Ford's electronic vehicle selector helps you focus on the models meeting your needs. There is an electronic guide to vehicle sizes and types, a glossary of auto terms and Ford's electronic magazine with news on awards, new products and innovations in the works. A Ford dealer locator also is available to let you search by city, state, ZIP code or area code to find the Ford dealer nearest you. Finally, Ford wants to know about your experiences and preferences in automobiles. Complete an online questionnaire and Ford will send you a 42-page booklet called "Car Buying Made Easier." GO FORD

For a look at what three of the nation's leading automobile manufacturers have in store for you in 1987, take a trip to The Electronic Mall today. Type GO MALL at any prompt on the CompuServe Information Service.

APPAREL/ACCESSORIES

APC	Apparel Concepts for Men
CA	Casual Tee's
IO	Inside*Outside
LH	L'eggs/Hanes Outlet
MJ	Milkins Jewelers
BAG	Woodstock Leather Co.

AUTO

BU	Buick Magazine
CHV	Chevy Showroom
FMC	Ford Motor Co.

BOOKS

BAL	Ballantine Books
MH	The McGraw-Hill Book Co.
MER	Mercury House
WB	Waldenbooks

COMPUTING

CE	Computer Express
CL	Conroy-LaPointe
DSC	Discount Computers
GL	Great Lakes Business Forms
HMK	Hallmark Color Mail
HTH	The Heath Co.
IBM	IBM Canada LTD
IR	Icon Review
IS	Investment Software

Discover the 'Buick difference' online: *Test 'drive' a Buick*

DSK	1-800-Floppys
MM	Marymac Industries Inc.
MNU	Menu International
MO	Misco Computer Supplies
SR	Sears, Roebuck & Co.
SDA	Software Discounters of America
VC	Virtusonics Corp.
WOC	World of Computers

FINANCIAL

BNB	Beneficial National Bank USA
INC	Business Incorporating Guide
CN	Colonial National Bank USA
DWR	Dean Witter Reynolds
EL	Equitable Life
MU	Max Ule Discount Brokerage
SLG	Sun Life Group

GIFTS/GOURMET

AK	Alaska Teleshopper
COF	Coffee Emporium
EX	Executive Engraver
FTH	Fifth Avenue Shopper
FFS	Florida Fruit Shippers
HI	Hawaiian Isle
HH	Hobbit Hole/Wyandotte Wines
LM	Lincoln Manor Baskets
SIM	Simon David
TF	Tooth Fairyland
WK	Walter Knoll Florist

HOME/LEISURE

CC	Cosmic Concepts
GG	The Game Getters Inc.
HC	Hobby Center Toys
MAO	Music Alley Online
QT	QualiToy
RR	Rin Robyn Pool & Patio
TSR	TSR Hobby Shop
VCS	Vacuum Advance

MERCHANDISE/ELECTRONICS

AA	American Airlines Catalog
ATT	AT&T
CFD	Crutchfield
NCS	Nationwide Catalog Shopper
OM	Office Machines & Supplies
ORD	CompuServe Store
SR	Sears, Roebuck & Co.
SUN	Sunland Camera
XDM	Xerox Direct Marketing

ONLINE SERVICES

EF	EF Hutton
GLO	Globalink
NN	NewsNet
OA	Official Airline Guides
VL	Videolog

PERIODICALS

CW	CW Communications
DJ	Dow Jones & Co.
ME	EBSCO Magazine Entree
ECO	ECOPRESS
US	USA TODAY

PREMIUM MERCHANTS

AXM	American Express Merchandise
BL	Bloomingdale's By Mail
NM	Neiman-Marcus
TIF	Tiffany & Co.

RECORDS/MOVIES

CF	CBS/Fox Video
EMC	Express Music CDs
MV	Magic Castle Video
RC	RCA Direct Marketing

SPORTS/HEALTH

HF	Carolina Health & Fitness
MN	Merle Norman Cosmetics
VM	VitaMenagerie Discount Vitamins

TRAVEL

AF	Air France
AT	Ameropa Travel

News Service Adds The Washington Post

One immediate effect of the information age has been a figurative shrinking of the world — but actually keeping up with world news is more time-consuming than ever.

Who has time to read all those news stories from several different sources each day? CompuServe's Executive News Service (GO ENS) does. And it saves time by enabling readers to preselect only those items they want to read. ENS is available to CompuServe subscribers with the Executive Option.

Here's how the screening process works: News from two award-winning sources, the Associated Press wires and The Washington Post, is "clipped" as a value-added feature for ENS users and stored in electronic folders. Subscribers specify the kind of news they want to read, such as business, financial, sports or entertainment, using a series of key words that electronically track the news 24 hours a day.

The Washington Post is the most recent online addition to this service. Famous for its expert political coverage, The Post covers the events on Capitol Hill, in the White House and in the Supreme Court. Key candidates, lawmakers and pending legislation are given careful and frequent analysis, offering a unique insight into the events occurring in Washington, D.C.

ENS users receive pertinent sections of The Post seven days a week, including world and national news, lead feature stories and editorials of interest to a national audience.

The first (or "A") section of The Post, the editorial page, the schedule of daily congressional activities, the Supreme Court calendar and the Sunday "Outlook," a major editorial section, are included. The daily Business section, including "The Federal Report," also is available, as is the special Monday business tabloid that includes sections on international business news and investing. Selected stories from the "Metro" section focus on local news events in Washington, D.C. Lead stories from the "Style" section also are online.

Columnists featured in The Post's online edition include Ellen Goodman, George Will, Edwin M. Yoeder Jr., Arthur Ash and E.M. Abramson.

Additional items in this electronic edition are feature stories offering in-depth explanations and analyses of complicated news stories, and transcripts of major speeches and press conferences,

Clip it out electronically: *The Washington Post joins Executive News Service*

especially those by President Reagan and other important politicians.

"An important factor for those outside the Metro Washington area is timeliness," says Ed Roberts, systems manager in the advanced systems department at The Washington Post. "CompuServe users will have The Post's coverage of political facts and commentary early each morning. They also will have the ability to quickly focus on topics of interest to them."

Also online is the Associated Press, the backbone of CompuServe's Executive News Service. The AP provides national and international news stories as well as items from all 50 states as they come off the wires. As the largest news-gathering organization in the world, AP offers timely coverage of news events

around the nation and the world.

ENS users can select various options, including browsing the news of the day as it is filed or seeing the news that has been posted in the last hour or so. Creating an electronic clipping folder to cull only those items of particular interest to the user is simple with step-by-step instructions online in ENS.

"ENS offers two impressive news sources and the time-saving convenience of clipping stories of personal interest," says Kevin Knott, CompuServe product marketing manager. "Executives, professionals and anyone with an interest in current news events will find that ENS keeps them informed without cutting into their busy schedules."

— *Cathryn Conroy*

How to Use ENS to Clip Stories

Commands may be used in the Executive News Service to access more efficiently the stories you want to read. Menus, used to define your story selection, are bypassed when you enter commands at ENS prompts. All ENS commands may be abbreviated to three characters except for folder names, which must be specified in full, and two-letter wirecodes.

There are three commands for accessing stories. Use the SCAN command to get a menu of story titles or leads for a selected news area (current, late breaking or a folder). For example, the command SCAN CURRENT OH SPORTS displays a menu of Ohio sports titles from the last 24 hours. The BROWSE command will give you a prompt for each selected story, and the RETRIEVE command will display all

selected stories.

By typing CREATE Folder, you will receive prompts for specifying search criteria. You can list the search specifications for any folders by entering LIST Folder. To change any of your search specifications, simply type CHANGE Folder. Clipping folders are easy to create and maintain when using commands.

To remove ENS menus, set your mode to command by typing SET MODE COMMAND. Instead of receiving menus, you will be prompted by "ENS!". You may return to menu mode by typing SET MODE MENU. The above commands will work in both menu and command mode.

Help is available at almost every prompt in ENS by typing H, ?, or HELP. If you want help with a command, type HELP followed by a command (e.g., HELP SCAN).

— *Marcia Haddox*

Business Briefs

Bank One Travel Exchange Assists Small Businesses

Small business travelers now can enjoy the same corporate rates available to larger companies when they use Bank One Travel Exchange. This service is available to CompuServe's commercial customers.

Users who establish Bank One Travel accounts can make their airline and hotel reservations electronically through TWA Travelshopper and the ABC Worldwide Hotel Guide.

Fares, timetables and other factors, such as meal requests and seat or room selections, may be reviewed and evaluated according to the traveler's own priorities. With a convenient touch of a button, tickets are ordered and reservations are made.

Finally, reservations are transferred electronically to Bank One, complete with instructions on how tickets should be delivered to the traveler.

Institutional Money Managers Reach Clients Online

Several well-known financial firms are using CompuServe to electronically disseminate their own research information to their clients. E.F. Hutton, Goldman Sachs, Merrill Lynch and Eberstadt Fleming currently use this business development tool, and Kidder Peabody is participating in a similar pilot program.

Participating firms compile their own research databases, usually updating them daily. Their clients then dial into CompuServe to retrieve the information. Several of the firms also have established electronic services for their clients, allowing a two-way exchange of information. For more information, contact CompuServe's New York Financial Branch. 212/668-0470.

Crosstab Reports Available

Three new demographic Crosstab Reports are available in SUPERSITE, the demographic database system on the Executive Option of the CompuServe Information Service.

The reports display age versus several key demographic items. the Age by Income Report shows household income versus age group for 1980, 1986 and 1991 in two pages. Percentages and absolute numbers are displayed.

The Housing Value by Age Report shows 1980 home value versus age group in percentages and absolute numbers. Numbers for 1986 and 1991 are not available because the Census Bureau updates housing values once every 10 years.

These two updates especially can be useful to bankers and realtors to illustrate by age the economic well-being of the population for potential markets.

The Age by Sex Report displays detailed age breakdowns to age 85. Numbers and percentages for 1980, 1986 and 1991 are shown for these age groups. This report is especially useful to the health care market and other services concerned with persons older than 65. All Crosstab Reports have a retail value of $50.

Any CompuServe subscriber may view a Crosstab Reports sample by typing GO SUPERSITE at any prompt on the CompuServe Information Service.

For More Business Information

To obtain more information about capabilities offered to CompuServe's Business Information customers, contact the CompuServe branch sales office nearest you:

|		
Phoenix, Ariz. 602/863-1404	**Cincinnati, Ohio** 513/771-8111	**Chicago, Ill.** 312/782-5409
Irvine, Calif. 714/752-7240	**Cleveland, Ohio** 216/241-6818	**Indianapolis, Ind.** 317/635-9686
Los Angeles, Calif. 213/216-5867	**Columbus, Ohio** 614/792-1301	**Louisville, Ky.** 502/585-4016
San Francisco, Calif. 415/777-2737	**Dayton, Ohio** 513/223-6875	**Boston, Mass.** 617/235-0772
Santa Clara, Calif. 408/727-1468	**Toledo, Ohio** 419/243-2600	**Detroit, Mich.** 313/362-1860
Denver, Colo. 303/629-5514	**Philadelphia, Pa.** 215/563-7607	**Minneapolis, Minn.** 612/338-5678
Westport, Conn. 203/222-1853	**Pittsburgh, Pa.** 412/391-8845	**St. Louis, Mo.** 314/241-0700
Washington, D.C. 703/391-0010	**Memphis, Tenn.** 901/452-8251	**Parsippany, N.J.** 201/898-1944
Miami, Fla. 305/264-6094	**Dallas, Texas** 214/953-0207	**New York, Commercial** 212/486-2440
Atlanta, Ga. 404/231-1440	**Houston, Texas** 713/237-8582	**New York, Financial** 212/668-0471

Want to Read More Hardware Reviews?

GO OLT from any prompt in the CompuServe Information Service and choose "Product Reviews" from the main menu.
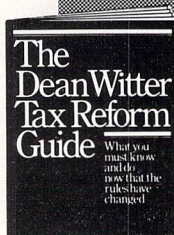
ONLINE
T O D A Y

Diconix 150:

A Tiny Printer That Packs a Wallop

Diconix Inc., A Kodak Co.
3100 Research Blvd.
P.O. Box 3100
Dayton, OH 45420
513/259-3100

Computers: Any computer capable of driving a Centronics-compatible parallel port.
Operating System: As appropriate for computer.
Features: 12-jet, vertical array, thermal inkjet printhead; speeds of 150 cps (characters per second) in data processing mode or 50 cps in letter-quality mode; eight alternate character sets; selectable pica, elite, script, italics, proportional, compressed and double-width type styles; graphics resolution of 192 by 192 dots per inch; bidirectional and unidirectional printing; friction or tractor paper feeding.
Options: None.
Model Tested: Standard Diconix 150 with Centronics parallel connector driven by Commodore 64 with Cardco +G parallel interface.
Base Price: $479

Reviewed by Cheryl Peterson

Smaller than the pieces of paper it prints on, the Diconix 150 is an amazingly light, quiet printer. Kodak has taken the best features of the Hewlett-Packard ThinkJet printer and made the printer more portable. Not content with that, H-P added Epson and IBM compatible control codes to make it simple to use. The front panel controls and indicators are easy to find and use.

The unit I used had a Centronics parallel interface, but Diconix plans to offer an RS-232C serial version soon. Since most of my other printers use the Centronics protocol, I only needed to attach this printer to an existing cable and connect a computer at the other end. I tested it with the Commodore 64 using a Cardco +G interface, and it worked beautifully. When I used the Diconix's internal DIP switches to turn off automatic line feeds, it worked with graphics programs like the Print Shop.

Before the unit can be used, an ink jet cartridge must be installed. The process is quick and simple, and the instructions are explicit. The Diconix uses the same cartridge as the H-P, so cartridges are readily available. At 500 pages per cartridge selling for a little under $8, the price is reasonable.

As with the H-P, special blotter paper is recommended and is slightly more expensive than regular paper. Although regular paper can be used, print quality deteriorates noticeably. The cartridge is meant to handle only standard 8½-inch wide paper, either tractor or friction fed, and one DIP switch sets 11- or 12-inch paper lengths.

As for print quality, the draft mode is quick but barely legible and should be reserved for quick content and type-style checks. On the other hand, the triple-pass quality mode looks wonderful, and a pretty script mode is built in. It also handles double striking, condensed printing, superscripting and subscripting (in reduced size), underlining, proportional spacing and italic printing.

One great feature is easy access to the fonts. With the printer online, all that is necessary to change fonts is to press buttons on the front panel: the line feed button activates draft, form feed sets quality and both simultaneously indicate script. These also can be set by software switches. The printer has reverse feed to accommodate complicated printing operations and an envelope mode.

The manual is well done. All print control functions are outlined extensively, and illustrations are adequate. Sample programs demonstrate use of the graphics and alternate character sets.

The printer can be operated from AC wall current or rechargeable ''C'' batteries. How did they get so much in such a small package? The secret is the location of the batteries. All five of them fit inside the platen.

An indicator lets you know when battery charge is low, after which the printer should print two additional pages. The printer must be manually set to recharge, and LEDs show when a full charge is attained after about 10 hours. The printer is rated to print 150 pages or about 50 minutes per charge. It is possible to print without a full charge, but that is recommended only when using the AC power adapter.

The Diconix 150 is a truly portable printer. It is a bit expensive, but it is the perfect unit for the traveling executive and fits comfortably in a briefcase with a TRS-80 Model 100.

Cheryl Peterson, a free-lance writer from Miami Beach, writes reviews for several computer magazines. Her CompuServe User ID number is 72366,2645.

Trademarks: Commodore 64 (Commodore Business Machines Inc.); Epson (Epson America Inc.); Hewlett-Packard and ThinkJet (Hewlett-Packard Inc.); IBM (International Business Machines Corp.); TRS-80, (Tandy Corp.).

GO EBB or circle 16 on the Reader Service Form.

Picture Draw

Offers Low-Cost Graphics Capabilities

Personally Developed Software
P.O. Box 3280
Wallingford, CT 06494-3280
203/237-4504 or 800/426-7279

Computers: IBM PC, PC-XT, PC-AT, PCjr, Portable PC and 3270 PC (not specifically recommended for compatibles by supplier but will work on at least some compatibles).
Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.
Media: Requires one double-sided diskette drive or a hard disk.
Copy Protection: None.
Required Peripherals: Color monitor with IBM Color Graphics Adapter (or compatible video adapter); program runs with EGA cards but does not use enhanced graphics.
**Other Requirements:** Minimum 256K RAM.
Optional Items: Additional diskette drives or hard disk; IBM Graphics Printer (or compatible); Mouse Systems Mouse; joystick.
System used for test: 640K Compaq Deskpro Model 2 with two diskette drives, 20MB IOMEGA Alpha-10 Cartridge Drive Subsystem (Bernoulli Box), Amdek Color 722 RGB monitor, STB Systems EGA Plus video adapter, Torrington Manager Mouse (Mouse Systems compatible) and Epson FX-85 printer; running IBM PC-DOS 2.10.
List Price: $24.95

Reviewed by Ernest E. Mau

I'm always surprised but pleased when low-cost software turns out to be better than expected. That happens frequently with IBM's Personally Developed Software, and Picture Draw is no exception. Here is a simple, flexible graphics package that outperforms some packages costing several times more.

X: 518 Y: 99

SEAGULL
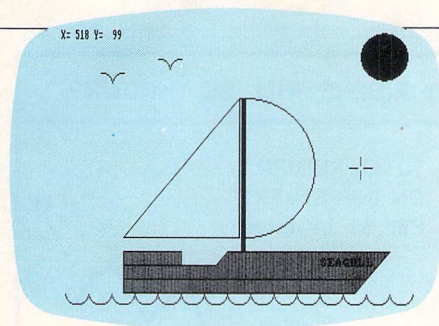
Don't misunderstand. Picture Draw isn't a threat to the high-level business and presentation graphics packages costing hundreds of dollars. Nor can it touch computer aided design and drafting (CADD) systems. But it should give many "draw and paint" programs a run for their share of that market.

Like other Personally Developed Software products, all documentation is on disk. The user must first run the "G" program and either read the manual on screen or print it on paper. Since this manual contains 78 pages (not screens), printing is the best bet.

The program operates in CGA mode, with the usual medium-resolution palettes and a standard black-and-white high-resolution option. The program easily shifted my EGA-style video adapter into CGA mode. Exceptions were menus with color selections or patches, where the sample patches actually displayed in EGA mode. Although not a serious problem, differences in brilliance and hues between those patches and drawing pages sometimes were surprising.

Picture Draw offers extensive features and options from freehand sketching through structured drawing of solid and outline rectangles, circles and ellipses. It has point-to-point line drawing, filling and unfilling of objects, several erasure functions, and a "recover" command to undo the last drawing command. There are ways to capture "images" into memory and manipulate them before placing them back onto the main drawing, facilities to rotate or mirror images and several methods of centering the cursor or image on the screen or in a box. A nifty "italicize" function can slant an entire image, not just text but the drawing itself. The program can even preview the effects of color mixing using selected methods.

A one-step zoom enlarges the drawing area near the cursor for a closeup view. Individual "dots" can be added or deleted by changing the cursor color for a fine degree of resolution.

Text lettering can use nine attractively and professionally prepared font styles, including Gothic, Old English, Script and others. Letter sizing provides independent control of horizontal and vertical dimensions, and spacings between letters and between lines are controllable.

Printing hard copies is well done and this capability offers a choice of single, double or triple densities, plus control of whether color patterns are printed as dots or lines. One thing I didn't find was an easy way to adjust the printout size without re-editing and resizing a drawing or image within the program.

Even saving a drawing is versatile, with screen compressed, screen variable, screen BSAVE and image variable formats. By choosing the method of drawing storage, the user can minimize disk space or can prepare a file usable by something like a BASIC program.

All program functions except the mouse control worked well. Picture Draw is supposed to accept a Mouse Systems Mouse on COM1 or COM2. My Torrington Manager Mouse is compatible with the Mouse Systems device in other programs but simply would not work with Picture Draw. That meant having to use cursor keys for all drawing. Annoying as that was, at least the program allows cursor movement increments to be changed at a keystroke, which keeps key control from being impractical.

One gripe: The documentation never provides a single-page summary of all controls. This program does not display a menu while in drawing mode, so the user must remember the various controls, which include the F1 through F10 keys alone, shifted and combined with Altmode or Control keys. Other controls use letter keys and letter keys combined with other keys. With more than four dozen special commands, it would have helped if a summary of all keystrokes had been included.

Anyone interested in a draw-and-paint program would do well to look at this one. It would be hard to find a program approaching Picture Draw's capabilities at anything near its price.

Ernest E. Mau, a full-time free-lance writer and Online Today reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.

Trademarks: Alpha-10, IOMEGA and Bernoulli Box (IOMEGA Corp.); Compaq and Deskpro (Compaq Computer Corp.); EGA Plus (STB Systems Inc.); Epson and Epson FX (Epson America Inc.); IBM, PC, PC-XT, PC-AT, PCjr and PC-DOS (International Business Machines Corp.); Manager Mouse (The Torrington Co.); Mouse Systems (Mouse Systems Corp.); MS-DOS (Microsoft Inc.).

GO EBB or circle 17 on the Reader Service Form.

Picture Perfect and Graphwriter

Programs Tackle Business Charts

Picture Perfect:
Computer Support Corp.
2215 Midway Rd.
Carrollton, TX 75006
214/661-8960

Graphwriter:
Graphic Communications Inc.
200 Fifth Ave.
Waltham, MA 02254
617/890-8778

Computers: IBM PC, PC-XT, PC-AT and fully compatible computers; Picture Perfect also is available for HP 150, HP Series 200, HP Integral and HP Series 300.
Operating Systems: PC-DOS or MS-DOS version 2.0 or higher for either program.
Media: Picture Perfect and Graphwriter require two diskette drives or a diskette drive and a hard disk or cartridge drive.
Copy Protection: Picture Perfect is copy protected (installed on hard disk, program may be run without key diskette but must be uninstalled to backup hard disk); Graphwriter may be readily copied to working diskettes or a hard disk.
Required Peripherals: Color or graphics monitor with suitable video adapter; Picture Perfect supports numerous adapters, including CGA and EGA cards, Tecmar Graphics Master and monochrome Hercules Graphics Card; Graphwriter supports CGA cards and the Hercules Graphics Card but not EGA video adapters except in CGA-compatible mode.
Other Requirements: Picture Perfect requires 384K of RAM and Graphwriter requires 256K of RAM for image recorder or printer plots or 192K without image recorder or printer plots.
Optional Items: Additional diskette drives or hard disk; Picture Perfect supports 8087 and 80287 math coprocessors (highly recommended); Picture Perfect and Graphwriter both support image recorders such as the Polaroid Palette, numerous dot-matrix printers and various pen plotters.
System used for test: 640K Compaq Deskpro Model 2 with two diskette drives, 20MB IOMEGA Alpha-10 Cartridge Drive Subsystem (Bernoulli Box), Amdek Color 722
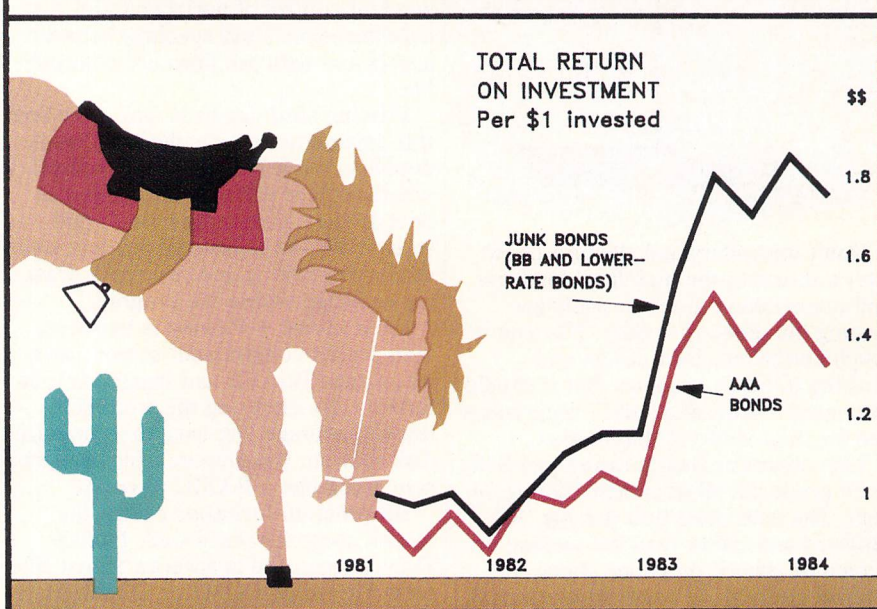
Creating perfect pictures: *Picture Perfect combines charts and graphics*

RGB monitor, STB Systems EGA Plus video adapter, 8087/2 math coprocessor and Epson FX-85 printer; running IBM PC-DOS 2.10.
List Prices: $295 for Picture Perfect; $395 to $595 for Graphwriter.

Reviewed by Ernest E. Mau

Today's business graphics programs try to provide tools so even unsophisticated computer users can generate high-quality, effective charts and graphs from numeric data. Ideally, the user with no drawing ability and little mathematical talent should be able to produce visually impressive presentations from whatever numeric data are available.

Both Picture Perfect (version 3.4.1) and Graphwriter (version 4.30) achieve that. Although similar in their goals, each takes a different approach and has its own unique abilities.

Both programs are sizable. Picture Perfect arrives on seven diskettes; one is copy protected but installable to a hard disk and another holds sample charts. Graphwriter arrives on 10 copyable diskettes, including several dozen predesigned "style sheets." On a hard disk, Picture Perfect takes 2,063K (2,212K in 4K increments), while Graphwriter using combined basic and extension sets takes 2,538K (2,944K in 4K increments), so both consume substantial disk storage.

Both programs can use numeric data entered into tables from the keyboard or data imported from other programs
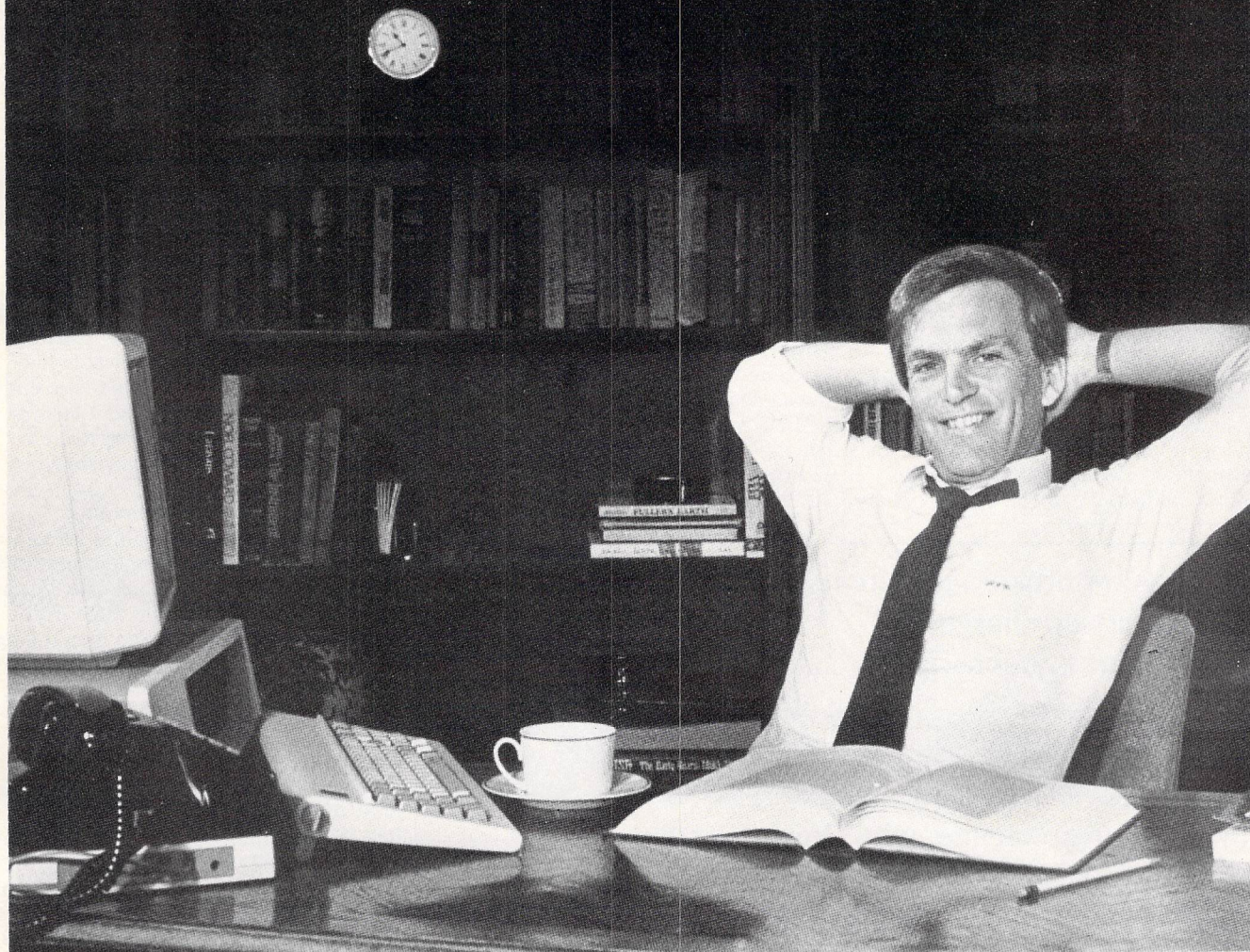
like databases or spreadsheets. Picture Perfect can import via ASCII fixed-format, ASCII variable-format and DIF files, while Graphwriter can import via DIF or SYLK files.

But similarities soon end. For example, Picture Perfect supports enhanced displays through EGA-style video adapters. Graphwriter does not. Thus Picture Perfect is the more impressive program on-screen, with greater resolution and more color flexibility. That gives Picture Perfect an edge in creating highly complex and intricately detailed charts and graphs, especially with tiny lettering.

There are differences in the kinds of graphs produced. Picture Perfect prepares horizontal bar, vertical bar, pie, and bar/line charts. Bar charts can use basic, clustered, overlaying or stacked formats. Pie charts can be exploded, have slices sorted and have the slices separated by spaces, but there can be only one pie on a screen, which is inconvenient to those who like comparative pies. The bar/line combination is intriguing because it mixes the two types and even has top and bottom charts that can be similar, different or combinations of types for heavy-duty data analyses.

Graphwriter also offers an extensive variety of charts, with predesigned "style sheets" for vertical bar, horizontal bar, grouped bar, paired bar, pie, pie/bar combination, line, surface line, scatter, bar/line, bubble, text/word,

Database Forecasts Local Weather

As I sat at my computer one night last summer, I thought I saw a flash of light in the western sky.

A thunderstorm, perhaps? My imagination? The radio was no help. I had the dial turned to a rock station that plays 100 hits in a row — no weather, no news, just music.

I needed to know if we were in for a thunderstorm. If so, I had to shut down the computer.

That's when I did something on CompuServe I had been unable to do a few months before. I got my local weather forecast, including a warning that helped me plan the remainder of the evening.

Is that such a big deal? It certainly is. Until local forecasts were available on CompuServe, I had to wait for a radio announcer to read the forecast or for the TV news at 6 or 11 o'clock to see a jolly forecaster dance around a weather map that looks like green-and-blue pizza.

Now CompuServe offers local weather forecasts for hundreds of cities throughout the United States. And those reports are easier to get than before.

The command to get to the Public Weather area of CompuServe is GO WEA at any prompt. The first item on the menu is Local Forecasts.

You can choose option 1 on the Public Weather menu and press the Return key or type LF and press the Return key to get the LF ID: prompt, where you can probably get a local forecast for your area. If not, choose the nearest large city with a National Weather Service station.

The system is not fussy about how you enter your local identifier. Simply typing the name of the city will work in most instances, but giving a two-letter state abbreviation will allow the system to target the specific forecast.

If you have a temporary mental block and forget how to spell the city's name (listening to 100 rock-and-roll songs in a row sometimes does that to me), enter the first two or three letters of the city's name followed immediately by an asterisk. You will get a list of cities beginning with those letters.

When I typed the name of my city at the Local Forecast prompt, I found there was a 50 percent probability of showers and thunderstorms throughout the evening. After the forecast, it returned me to the LF: prompt.

I still needed more specific information. I was certain now it was lightning in the western sky, and I needed to know if there was a warning of particularly bad weather.

I could have simply hit the Return key at the LF: prompt to reach the main Public Weather Menu, where I could have chosen the WW: (Weather Warning) option. But there is a shortcut to get from one area of the public weather forecast to another. At the LF: prompt, I typed WW and pressed the Return key and got the WW: prompt.

Here I typed the name of my city and again pressed the Return key. I learned that a severe thunderstorm watch had been issued for the immediate area until midnight. The warning noted a line of severe thunderstorms moving toward my city with lightning, heavy showers and possible hail.

The local forecast option on CompuServe's Public Weather menu is not a replacement but an addition to the menu. You still can get forecasts for entire states by choosing the State Forecast option on the menu and then typing the two-letter postal code for the state at the SF: prompt. You also can get weather warnings for an entire state by typing the state code at the WW: prompt.

Remember, weather warnings include both summer and winter storm warnings. So, if you live in snow country and your bones tell you a big snow is on the way, you can check to see if the National Weather Service agrees. Ski area reports are available for Denver, Salt Lake City, San Francisco, Boston and Albany, N.Y.

Meanwhile, if you would like to know more about how to use the Public Weather menu to get information about precipitation probabilities, sports forecasts and marine forecasts, choose option 9 on the Public Weather menu for instructions and then option 10 to find out what's new.

A recent What's New says local forecasts are the ''first part of several planned additions to the weather database to provide a wider variety of weather reports on the CompuServe Information Service.''

As a dyed-in-the-wool weather junkie, I can't wait.

David Peyton is a co-author of How to Get the Most Out of CompuServe. *His CompuServe User ID number is 76703,244.*

Gantt, organization, table and other chart types. Here, too, bar charts can be basic, stacked or clustered. However, Graphwriter can draw multiple pies on a single screen. Furthermore, some of the special charts like bubble, Gantt and pie/bar combinations can be useful. As a result, Graphwriter has an edge over Picture Perfect in the sheer number of ways data can be graphed or charted.

Operationally, Picture Perfect seems the easier program to use. It does not employ style sheets, so the user merely enters the particular part of the system applicable to a specific type of chart or graph. From there, the user simply enters the necessary information into menu-driven tables and lets the program work.

Picture Perfect is moderately interactive. Line thicknesses, colors, shadings, text fonts and other parameters all are easily controlled, and seeing the results on screen for changes, additions or deletions is quickly and smoothly accomplished. Best of all, Picture Perfect does not make the user work blind to do things like sizing or moving titles, labels and legends. Much of that is done visibly on-screen under keyboard control.

Graphwriter is more complicated. The user first chooses a predesigned style sheet or format from the manual to establish the general form of the chart or graph. New style sheets also can be created and stored on disk for future use. Each chart format has highly specific requirements regarding the information it needs, so planning is crucial and is best handled by completing printed forms supplied with the package. Once the information is ready and organized on those forms, it can be entered into the various program menus. This is not hard, but a lack of interaction

between a visible chart and the menu manipulations leaves the user blind through most of the work. To preview a chart or graph on screen, it is necessary to back out of most other functions, replot the graph to the display and then return to whatever editing was being done. It takes many more keystrokes to work through Graphwriter than it does to work through Picture Perfect.

The fact that Graphwriter can export its creations to a companion program called Freelance also is important. Freelance, in turn, provides access to symbol libraries plus structured and freehand drawing facilities that can further enhance and augment a Graphwriter chart or graph. It is those Freelance functions that make Graphwriter outputs truly attractive and effective.

In contrast, Picture Perfect is a closed program. It can use optional type fonts from its companion program called Diagraph, but it cannot export graphs or charts to Diagraph or access the thousands of available Diagraph symbols.

What Picture Perfect creates is exactly what the user gets unless he or she is imaginative enough to find another route. For example, I set up Picture Perfect to an HP7475 plotter but I route the output to a disk file. After translating and importing that file into American Small Business Computers' CAD package called ProDesign II through a utility program it provides, I then use ProDesign II to enhance and supplement Picture Perfect. It is cumbersome and time consuming, but it works!
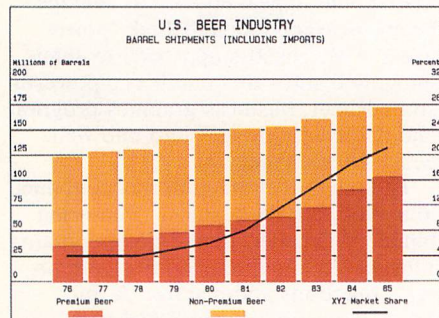
There are too many other differences to enumerate here, but I found no serious flaws in either program and no inoperable features. Both programs are extremely good at their jobs, so the choice must be based on individual needs. For

ease of use, maximum screen resolution and convenient interaction when generating the most common business graphs, I would choose Picture Perfect. For flexibility, creativity and the widest variety of graphing and charting forms, I would choose Graphwriter. If money were no object, I would want both so I could have the specific talents of each.

Ernest E. Mau, a full-time free-lance writer and Online Today *reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.*

Picture Perfect
GO EBB or circle 19 on the Reader Service Form.
Graphwriter
GO EBB or circle 20 on the Reader Service Form.

Charting flexibility: *Graphwriter excels in display options*

SideTalk

Memory-Resident or Stand-alone Communications

Lattice Inc.
P.O. Box 3072
Glen Ellyn, IL 60138
312/858-7950

Computers: IBM PC, PC-XT, PC-AT and compatibles.
Operating Systems: PC-DOS or MS-DOS.
Media: Requires two double-sided diskette drives or one diskette drive and a hard disk.
Copy Protection: None.
Required Peripherals: Hayes-compatible modem.
Other Requirements: Minimum 128K RAM.
Optional Items: 256K RAM recommended for memory-resident usage.
System used for test: 640K IBM PC-XT with IBM black-and-white monitor, IBM monochrome display and printer adapter, two diskette drives, Maynard 20MB hard disk, Hayes Smartmodem 300 and Okidata Microline 84 printer; running PC-DOS 2.1.
List Price: $119.95

Reviewed by William J. Lynott

SideTalk is a communications package with a difference. It is easy to use and includes just about all functions you would expect of a full-featured communications program, with an important plus. It can be loaded as a memory-resident program ready to handle communications at the touch of a toggle key. Unlike most memory-resident utilities, though, SideTalk does not stop working when you toggle back to your main application.

This means you can set SideTalk to answer the phone or transmit a long file and then toggle back to continue word processing or spreadsheet activities. This "multitasking" capability worked smoothly during the test I gave it. After starting the transmission of a long file, I returned to my word processor. When I later checked, the entire file had been transmitted successfully.

The program diskette comes with a DOS batch file that simplifies the installation procedure for floppies or hard disks. You may elect to have Sidetalk loaded automatically as a memory-resident program each time you boot your computer. Remember, though, that SideTalk takes up about 68K of main memory. If you are already tight on memory, it may be better to load

SideTalk only when you need it.

I found SideTalk much less convenient on floppies than on a hard disk. The program disk contains several SCL (SideTalk Communications Language) and help files, all instantly accessible from a hard disk when you are using floppies.

The main SideTalk menu screen displays 12 quick commands invoked with various Altmode key combinations. For example, [Alt-C] puts you in command mode, [Alt-D] hangs up on any call in progress, and [Alt-S] sends incoming data to a disk file.

One of SideTalk's most distinguishing features is its SCL internal command language that uses numerous BASIC-like commands. You can use the program's command files or create your own to satisfy custom applications. About half of the SideTalk documentation is taken up with a reference listing and programming guide for SCL. Creating an automatic logon command file for CompuServe was a relatively painless procedure.

If you do not want to program at all, the SCL files included with SideTalk probably will handle most or all communications chores without any changes. A touch of the F10 key activates SideTalk's pop up menu, which contains nine choices: Help, Set up communications, Phone directory, Auto answer, Hangup, Send a file, Receive a file, Play a game and Quit to terminal. Just highlight your selection with the cursor and press the Enter key.

Selections from the main menu produce subdirectories that lead to the function you want. If you choose Phone Directory, the resulting subdirectory will offer these choices: add/edit an entry, list an entry, delete an entry, list all entries and exit. Each menu selection results in other subdirectories until you are at the function you want to use. Of course, the path can be shortened if you create your own command files using SCL.

While having a communications program lurking in memory-resident background can be convenient, there are certain precautions to keep in mind. Freezing screen output in your main application or copying large files while SideTalk is working in the background may cause SideTalk to pause. This could cause problems when SideTalk is sending or receiving files. However, if anything happens in your foreground application to affect SideTalk operation, it sounds a buzzer to alert you that something is wrong.

I think SideTalk is a well-designed communications package that should adapt easily and completely as an individual's requirements grow from basic to more advanced.

William J. Lynott is president of W.J. Lynott Associates, a management consulting firm in suburban Philadelphia. His CompuServe User ID number is 70007,420.

Trademarks: CompuServe (CompuServe Inc.); IBM, IBM PC PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); MS-DOS (Microsoft Inc.); Okidata Microline (Okidata Div. of Oki America Inc.); SideTalk (Lattice Inc.); Smartmodem (Hayes Microcomputer Products Inc.).

GO EBB or circle 22 on the Reader Service Form.

Excel 1.0

Goes Beyond Powerful Spreadsheets

Microsoft Corp.
16011 N.E. 36th Way
Box 97017
Redmond, WA 98073-9717
206/828-7400

Computers: Apple Macintosh 512K and Macintosh Plus.
Operating System: Macintosh desktop environment.
Media: Provided on three single-sided diskettes (includes backup).
Copy Protection: Protected system; backup included.
Required Peripherals: External disk drive.
Other Requirements: ImageWriter printer.
Optional Items: Hard disk and Apple LaserWriter printer.
System used for test: 512K Apple Macintosh with single-sided internal drive, 800K double-sided external drive and Apple ImageWriter I printer.
List Price: $395

Reviewed by Joe Farace

Excel is one of those rare packages that should appeal equally to average business users and so-called "power users." Microsoft's approach to semi-integrated software combines a powerful spreadsheet, business graphics program and database manager into one well-designed package.

The main documentation is contained in a slick, but all-business, three-ring binder. A smaller, bound book contains information about capabilities with arrays, functions and macros. A thin volume describes using Excel with Switcher. A Quick Reference Guide contains everything you need to jump in, which I did.

As a Multiplan user, I converted an old Multiplan file to Microsoft's SYLK format and copied that file onto the disk in the internal drive. Excel opened the file immediately, and I felt at home. Later when reading the documentation, I found that Multiplan files can be transferred without conversion, which worked perfectly when I tried it.

The two disks used to boot the computer are almost full. Unlike Lotus' Jazz, Microsoft has yet to accommodate double-sided disks. Yet, you can make double-sided copies if you do not mind the "insert master disk" approach to copy protection scheme. Microsoft recommends using an external drive, but it is more like a requirement. With both disks almost full, Excel, like Jazz, seems more comfortable in a hard-disk environment.

Excel is fast in any of its three operating modes. Changes in spreadsheets are swiftly accomplished even when you use floppies. And spreadsheets or "worksheets" can get pretty big. The work space for any given spreadsheet is 256 columns by 16,384 rows, so I doubt the average user will approach the program's upper limits.

Even faster is the program's ability to provide diverse, professional-looking charts from spreadsheet data. The graphic quality may be somewhat less impressive than some other programs,

but Excel more than makes up for that in speed and ease of use.

The database function is set up in spreadsheet fashion. I never have been a fan of this approach, but with Excel's semi-integrated nature, it is more than adequate for all but the most demanding database applications. If you need the word processing or communications features of other integrated software, Apple's Switcher utility can add specific programs you would like to use.

Like Multiplan, Excel spreadsheets may be "linked" so changes in one are made simultaneously in another. Furthermore, charts are automatically linked to spreadsheets.

One notable feature is the way Excel handles macros. Macros may be created using simple commands or through Excel's "Set Recorder" feature so all keyboard and mouse activity is automatically recorded as a single-key command. I do not know an easier way to create macros.

Excel also supports arrays as arguments in spreadsheets and can produce arrays as results. To help people new to using arrays in spreadsheets, Microsoft has created a detailed manual. It is mandatory reading to get the most from the system.

Printing spreadsheets with a standard-width printer always has been a problem. While displaying a

spreadsheet on the screen, Excel shows where page breaks will occur. It also can preview the spreadsheet before printing. By seeing how the spreadsheet will look, you can modify margins to fit specific requirements. I would not check the "50 percent reduction" box without having a LaserWriter. While it can print on an ImageWriter I, dots get too big in relation to the type size. It would have been helpful if Microsoft had provided a 20 percent reduction option, but that is the only thing I did not like about Excel.

It may not be perfect, but I found little wrong with Excel. It is as easy for a novice to use as Multiplan (maybe easier), and provides awesome size and power serious users need. It is fast and provides good quality business charts with less fuss than other graphics programs I have used.

If you think I like Excel, you are right. Microsoft has created a business tool that works as hard for corporate users as it does for small-business people.

Joe Farace is a writer and photographer from Denver. He is a contributing editor of PhotoMethods *magazine and his reviews of Macintosh software will appear in an upcoming book from Arrays Inc.*

Trademarks: Apple, Macintosh, Macintosh Plus, MacWrite, ImageWriter, and LaserWriter (Apple Computer Inc.); Jazz, (Lotus Development Corp.); Multiplan and Excel (Microsoft Corp.).

GO EBB or circle 23 on the Reader Service Form.

FlickerFree
Helps Video Displays Run Faster

Steve Gibson
9 Lago Sud
Irvine, CA 92715
714/854-1520

Computers: IBM PC, PC-XT, PC-AT and compatibles.
Operating Systems: PC-DOS or MS-DOS version 2.0 or later.
Media: Supplied on one floppy diskette.
Copy Protection: None.
Other Requirements: Color, monochrome or built-in display adapter; cannot be used with EGA or PGA display boards.
Systems Used for Test: (1) 704K Heathkit PC-150 with high-resolution color monitor, two double-sided diskette drives and two 20MB hard disks; running MS-DOS 2.13. (2) 1408K Tandy 1000 with Tandy CM-2 color monitor, one double-sided diskette drive, and one 20MB hard disk; running PC-DOS 3.2.

List Price: $39 plus $1.50 shipping and handling

Reviewed by Hardin Brothers

As its name suggests, FlickerFree (version 1.0) stops screen flicker on IBM PC and similar computers. But it does so much more. It is valuable whether the screen does or does not suffer flicker.

FlickerFree's real purpose is to accelerate greatly the video display. The computers I use run three to four times faster with this program installed.

FlickerFree is memory resident. Once it is loaded, you can access an options menu any time and use cursor keys to set foreground, background and border colors, slow the computer's display if it goes too fast with FlickerFree and tell FlickerFree whether it must adjust for screen "static" or snow.

When running, FlickerFree uses 7,200 bytes of memory and is compatible with almost all other memory-resident programs. A companion program on the distribution disk, FFIX, can turn off FlickerFree automatically whenever

such programs load. Another disk program calculates how much faster the display runs with FlickerFree installed.

I have found two small problems with FlickerFree. The most annoying is that [Shift-PrtSc] does not always send the right information to the printer. Also, FFIX does not cure FlickerFree's conflict with Borland's Turbo Prolog. Temporarily turning FlickerFree off, a simple procedure, cures both problems.

FlickerFree improves the performance of my computers so much that I now am unwilling to use either computer without it. And it is so easy to use that most people may never need to read past the first page of its 20-page instruction booklet.

Hardin Brothers is an associate editor of 80 Micro *and a frequent contributor to several other magazines. He is also forum administrator of CompuServe's Writers' and Editors' Special Interest Group (GO WESIG).*

Trademarks: Heathkit (Heath Co.); IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); MS-DOS (Microsoft Corp.); Tandy 1000 (Tandy Corp.); Turbo Prolog (Borland International).

GO EBB or circle 24 on the Reader Service Form.

SQZ!

Compresses Lotus Worksheet Files

Turner Hall Publishing
10201 Torre Ave.
Cupertino, CA 95014
408/253-9607

Computers: IBM PC, PC-XT, PC-AT, Portable PC and 100 percent compatibles.

Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.

Media: Requires at least one double-sided diskette drive or a hard disk (program runs from same disk or directory as Lotus 1-2-3 or Symphony).

Copy Protection: None.

Required Peripherals: None.

Other Requirements: SQZ! resides and operates in approximately 30K of RAM; any release of Lotus 1-2-3 or Symphony.

Optional Items: Additional diskette drives or hard disk; SQZ! supports EMS memory boards; assorted support programs including Lotus Report Writer, Sideways, Note-It, Cambridge Spreadsheet Analyzer, Reflex and Q&A.

System used for test: 640K Compaq Deskpro Model 2 with 8087/2 math coprocessor, two diskette drives, 20MB IOMEGA Alpha-10 Cartridge Drive Subsystem (Bernoulli Box), 2MB Maynard Accent Expanded Memory Card, Amdek Color 722 RGB monitor, STB Systems EGA Plus video adapter, Epson FX-85 printer and USRobotics Courier 2400 modem; running IBM PC-DOS 2.10.

List Price: $79.95

Reviewed by Ernest E. Mau

One annoying thing about Lotus worksheets is their disk storage consumption. Even simple spreadsheets take considerable space, which often is at a premium. The memory-resident SQZ! program compresses Lotus worksheets while saving them to disk and expands them while loading them back into memory, shrinking data files without losing any contents.

SQZ! (versions 1.24 and 1.50) is easily used and almost transparent to 1-2-3 or Symphony. Just copy one program file to the disk or directory holding the Lotus program and use it to start the host program.

Using Symphony 1.1, I type "sqz access" or "sqz symphony" at the DOS prompt. SQZ! then loads and starts Access or Symphony. By keying [Alt-!] within Symphony, I control SQZ! options from a menu that toggles squeezing on and off, saves or removes cell values in formula cells, saves or removes blank cells, converts to ASCII "communications" format and, if desired, establishes password protection. Symphony and 1-2-3 display special screen markers whenever SQZ! is active.

Unless deactivated to load or save unsqueezed worksheets, SQZ! waits patiently for disk operations. When the Lotus program saves a file with SQZ! active, it is squeezed automatically. A loaded file is unsqueezed automatically. The resulting storage savings can be spectacular. A 75,659 byte worksheet took just 2,313 bytes or 3.1 percent of its original space when fully squeezed.

The supplier claims squeezing speeds saving and loading, but speedups were less dramatic than expected.

I moved Symphony 1.1 spreadsheets to and from floppies (Deskpro at 4.77 MHz) and identical files to and from a Bernoulli Box cartridge (Deskpro at 7.14 MHz). Accompanying tables list timings where an unsqueezed file was 75,659 bytes. "File 1" squeezed it to 21,553 bytes with no special options set. "File 2" squeezed it to 2,313 bytes by removing cell values. "File 3" squeezed it to 3,231 bytes by removing cell values and applying the "communications" option.

SQZ! Using Floppy Diskettes
(times in seconds)

	Save	Load
Unsqueezed file	35.3	50.1
File 1	26.4	47.7
File 2	19.4	39.6
File 3	18.7	40.4

SQZ! Using Cartridges
(times in seconds)

	Save	Load
Unsqueezed file	13.8	30.2
File 1	13.4	29.2
File 2	10.2	26.1
File 3	10.2	26.5

The floppy storage medium had a higher ratio of read/write time to squeeze/unsqueeze time and gave more noticeable savings. Notably, time savings achieved by squeezing with cell values removed may be further offset by having to recalculate after loading a spreadsheet.

The "communications" option makes an ASCII file, with or without password protection, for electronic transfer between computers running SQZ! Version 1.24 was not satisfactory and was blocked by any differences between generated and retrieved files. Header lines of electronic mail messages had to be carefully edited out before unsqueezing. File-mark changes occurring when uploading to CompuServe with XMODEM and "B" protocol and CompuServe's ASCII option also kept files from unsqueezing, but protocol transfers using the binary option worked perfectly.

A "cleanup" program added to SQZ! version 1.50 successfully stripped extraneous information and allowed proper unsqueezing. However, SQZ! still put unacceptable characters, such as slashes interpreted by CompuServe as commands, at the beginnings of lines. Files could be captured but not transmitted as ASCII character streams, but they finally worked with XMODEM and B protocols using both ASCII and binary uploading to CompuServe. Sending spreadsheets without error checking sometimes is unavoidable, so at this writing, another SQZ! version is being readied to assure that beginning-of-line characters are harmless.

Still, SQZ! is impressive. The difference between sending a 75K unsqueezed file and a 3K squeezed file reflects in connect charges, so it doesn't take long to recover the program's price.

SQZ! doesn't preclude using auxiliary programs. Besides working with 1-2-3 and Symphony translation utilities, it is supposed to allow squeezed worksheets to be input to programs like Note-It, Reflex, Sideways, Cambridge Spreadsheet Analyst and others. There are occasional incompatibilities, however. For example, SQZ! does not work with version 2.0 of The Spreadsheet Auditor from Consumers Software Inc., but it should work with version 3.0.

SQZ! is amazing! Even if it could not be used at all for communications, storage savings alone justify its price.

GO EBB or circle 25 on the Reader Service Form.

PopDrop 2.0
Improves Memory-Resident Program Management

InfoStructures Inc.
P.O. Box 32617
Tucson, AZ 85751
602/323-4600 or 602/299-5962

Computers: IBM PC, PC-XT, PC-AT and 100 percent compatibles.
Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.
Media: Requires one double-sided diskette drive.
Copy Protection: None.
Required Peripherals: Color or monochrome monitor; graphics capability not required.
Other Requirements: Each PopDrop "layer" consumes 1.5K of RAM plus whatever resident and non-resident programs are used.
Optional Items: Additional diskette drives or hard disk.
System used for test: 640K Compaq Deskpro Model 2 with two diskette drives, 20MB IOMEGA Alpha-10 Cartridge Drive Subsystem (Bernoulli Box), Amdek Color 722 RGB monitor, STB Systems' EGA Plus video adapter and Epson FX-85 printer; running IBM PC-DOS 2.10.
List Price: $19.95 plus $3 shipping and handling; registered users of version 1.0 may upgrade for $9.95.

Reviewed by Ernest E. Mau

When reviewing PopDrop 1.0 for *Online Today*'s print edition (August 1986), I admired its ability to manipulate memory-resident programs in layers and later remove them to release memory for other uses. With manual or batch file control, PopDrop greatly simplified jumping among sets of resident programs without rebooting or stripping resident programs individually.

If version 1.0 was good, PopDrop 2.0 is better. It still resides in 1.5K per layer and saves system status when loaded. Resident programs loaded after PopDrop still can be removed in individual layers from the top down or all at once with or without removing PopDrop itself.

Two key features enhance PopDrop 2.0. A new "command extension" facility accepts 15 characters for DOS commands, program names or batch file names, executing those items after the PopDrop command.

Of greater importance to me is a new "view" mode that displays PopDrop's layering. Each layer and its memory con-

sumption are shown, with tabulated memory totals across layers, total memory available and free space remaining. From this display, one can even remove all layers above a designated one. With DOS 3.x (not DOS 2.x), one also can display program names resident in each layer.
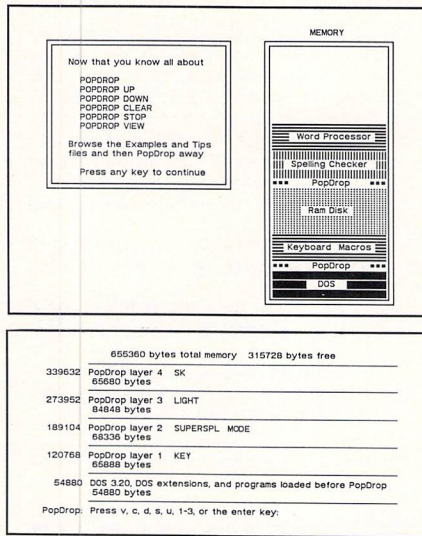
PopDrop saves exact screen attributes so users can call the view mode and return to an application screen that is exactly as it was left. PopDrop makes no color or other alterations, unlike some memory-resident programs.

PopDrop 2.0 still has limitations. It cannot remove a layer from under another, remove individual programs from multiprogram layers or resolve conflicts among incompatible programs. But PopDrop does help get conflicting programs out of the way.

I now rely on PopDrop for managing resident applications and often wonder how I operated without it.

Ernest E. Mau, a full-time free-lance writer and Online Today reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.

Trademarks: Alpha-10, IOMEGA and Bernoulli Box (IOMEGA Corp.); Compaq and Deskpro (Compaq Computer Corp.); EGA Plus (STB Systems Inc.); Epson and Epson FX (Epson America Inc.); IBM, PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); MS-DOS (Microsoft Inc.); PopDrop (InfoStructures Inc.).

GO EBB or circle 26 on the Reader Service Form.

Electronic Edition Software Reviews

The following reviews are available this month on *Online Today Electronic Edition* by typing GO OLT-230 at any prompt on the CompuServe Information Service.

EnhComp New BASIC Compiler
Manufacturer: *MISOSYS, Inc.*
Computers: *TRS-80 Models I, III and 4/4p/4d.*

Multiplan for the Commodore
Manufacturer: *Epyx, Inc.*
Computers: *Commodore 64 or 128.*

Cell/Mate Utility For Lotus
Manufacturer: *Clarity Software Corp.*
Computers: *IBM PC, PC-XT, PC-AT and compatibles.*

Lightning WordWizard For Turbo Lightning
Manufacturer: *Borland International, Inc.*
Computers: *IBM PC, PC-XT, PC-AT and true compatibles.*

EasyCAD's Revised Design and Drafting
Manufacturer: *Evolution Computing*
Computers: *IBM PC, PC-XT, PC-AT and compatibles.*

Introductory Editor, Lite Editor And JustEdit
Manufacturer: *IBM Personally Developed Software*
Computers: *IBM PC, PC-XT, PC-AT, PCjr. and 3270 PC.*

Chart-Master, Sign-Master and Diagram-Master Graphics
Manufacturer: *Decision Resources, Inc.*
Computers: *IBM PC, PC-XT, PC-AT and compatibles.*

Project Workbench Management System
Manufacturer: *Applied Business Technology Corp.*
Computers: *IBM PC, PC-XT, PC-AT, 3270PC and compatibles; available for Wang Professional Computer and DEC Rainbow 100 series.*

HomePak Integrated System For Home Use
Manufacturer: *Batteries Included, Inc.*
Computers: *IBM PC, PC-XT, PC-AT, PCjr. and true compatibles.*

Student WordPerfect Word Processor
Manufacturer: *WordPerfect Corp.*
Computers: *IBM PC, PC-XT and compatibles.*

Referee Resident Program Manager
Manufacturer: *Persoft, Inc.*
Computers: *IBM PC, PC-XT, PC-AT and true compatibles.*

Successful programmers: *Gates to Ratliff*

Programmers at Work

By Susan Lammers
Microsoft Press, 1986
392 pages, $19.95 (hardcover), $14.95
(softcover)
Reviewed by John Edwards

So, what is C. Wayne Ratliff up to these days? The name doesn't sound familiar? Well, he is the author of the ever-popular dBase II, the database package that made the ever-growing Ashton-Tate possible. Surely you recognize *that* name?

The personal computer world is full of little, gray men who slave away in cramped quarters in Silicon Valley, but the truth is that most of us know more about the guys who fix our cars than the programmers who create the software we use every day.

In *Programmers at Work*, author Susan Lammers interviews 19 of today's most successful software programmers (give or take a millionaire or two). Included in her book are transcripts of interviews with such talents as Gary Kildall (CP/M), Jonathan Sachs (Lotus 1-2-3), Toru Iwatani (Pac Man) and Andy Hertzfeld (the Macintosh's operating system). We also get the musings of

Microsoft BASIC's Bill Gates.

This is a book with a philosophy, and the philosophy is this: Boss men — money men — like John Sculley and John Akers may get all of the news ink and phosphor, but it is guys like C. Wayne Ratliff who do the dirty work.

These men (there are no women included in the book) work in nice air-conditioned offices and make gobs of money. The interviews show that these guys really *love* their jobs. In fact, most of them are downright addicted to fiddling around with computer code.

George Page, developer of PFS:File, explains the programmer's life: "You have to say to all your relatives, 'Look, I'm going to be gone for six to nine months. I'll be here physically, but I might as well not be. I'm going to be working on this thing, and I'll be absent-minded' . . . Working so hard can be devastating to your marriage and other relationships."

The book tells us these men are the hot test pilots — the guys with the right stuff.

If you are a baseball fan, you certainly are familiar with Lawrence S. Ritter's *The Glory of Their Times*, the story of the game's early days as told in transcripts by the men who played it. *Pro-*
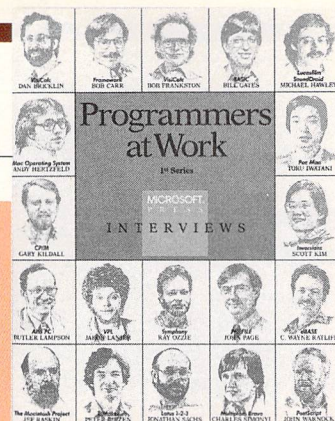
grammers at Work has much in common with Ritter's book. The men interviewed in *Glory* all were in their eighties or nineties when they spoke to Ritter, and the guys in Lammers' book are approximately 50 years younger. And while most of the ballplayers downplayed their accomplishments, many of the programmers come across as guys with egos that could shrivel a perfectly good floppy-disk.

Nevertheless, *Programmers at Work* will give you a good idea of what it is like to work in the personal computer software industry, a business that allows a guy to sit down behind a keyboard and type his way into millions, even if his name happens to be C. Wayne Ratliff.

John Edwards is a contributing editor of Online Today. *His CompuServe User ID number is 70007,412.*

Desktop Publishing from A to Z

By Bill Grout, Irene Athanasopoulos,
Rebecca Kutlin
Osborne/McGraw-Hill, 1986
219 pages, $17.95 (softcover)
Reviewed by Michael Naver

With the burgeoning interest in desktop publishing, this new book is a timely, thorough introduction to the subject, aimed at the first-time desktop publisher.

In assembling *Desktop Publishing from A to Z*, the authors have produced two books in one. The first is a business primer for publishing a newsletter, small newspaper or magazine. It covers basic audience research, budget, advertising, preparing material for the printer, mailing and promotion. If the book had nothing else, it would be a useful "how to" for someone launching a new publication.

But the authors also provide a detailed account of how to use modern microcomputer hardware and software to perform all (or nearly all) steps in publishing a small or "desktop" publication.
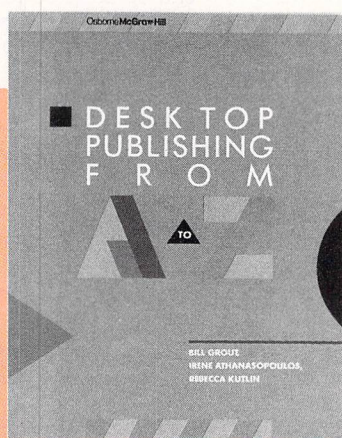
Desktop publications: *Getting started*

For example, a chapter on page design covers the uses of the most popular, current page layout software. The authors detail ReadySetGo, MacPublisher II and PageMaker to give the reader a good idea about producing page layouts.

Another chapter covers the use of laser and dot-matrix printers to convert screen images to camera-ready pages. These include the Apple ImageWriter and LaserWriter, Hewlett-Packard's LaserJet, the Cordata LP-300 and the high-end Imagen 8/300 Printstation. The authors also explain how digital scanning equipment can read images into personal computers.

Because Macintosh currently dominates desktop publishing, many of the book's examples are drawn from it. But the authors also discuss publishing systems (often more expensive) available with IBM PCs, PC-XTs and PC-ATs.

This book offers a fledgling publisher alternative ways to produce a publication. There is advice about doing manual paste-up and preparing copy for a commercial printer, and instructions for new electronic page composition and personal printing techniques.

Michael Naver of Baltimore, Md., is editor of High-Tech Alert for the Professional Communicator, *a newsletter advising corporate communicators and public relations counselors on uses of new technology. His CompuServe ID number is 70007,621.*

BOOK REVIEW

Understanding dBase III Plus

By Alan Simpson
Sybex Inc., 1986
415 pages, $19.95 (softcover)
Reviewed by William J. Lynott

You can't have your cake and eat it too, according to that hoary chestnut. But every time I work with dBase III Plus, I get the feeling you can come very close.

Most database managers fall into fairly narrow categories. They are either powerful and flexible, easy to use, or some compromise between those two extremes. But dBase III Plus is not so easily classified: It has a keyboard planted solidly at each end of the spectrum.

Software powerful enough to satisfy advanced programmers yet easy enough for beginners to access most of its features offers fertile ground for books intended to supplement the original documentation. And dBase III Plus is such software. It has spawned a dozen or more books intended primarily for either beginning or advanced users. *Understanding dBase III Plus* is clearly written for the beginner.

Its features are accessed most easily through its menu system, The Assistant. Advanced users gain speed and additional power when they learn how to bypass the menus by issuing direct commands through the program's dot prompt. The author of *Understanding dBase III Plus* cleverly introduces the beginner to the wonders of the dot prompt almost from the beginning.

In language that is imminently understandable, author Simpson provides a tutorial. He guides the reader step by step to create a small database. Relying primarily on the menu system, he explains how to perform sorting, searching, adding and deleting. Even in this simple exercise, he sneaks in subtle references to the dot prompt. The effect of this approach is to both accelerate and strengthen the reader's grasp of dBase III Plus fundamentals. If you are a dBase III Plus beginner who has not plunged a toe into the murky waters of the dot prompt, you will delight in seeing how easy the transition can be.

By the time you reach Chapter 12, you will be creating simple command files. Command file is another word for program; and so, after only 239 pages, you will have written your own simple dBase III program.

The final chapters of the book cover debugging and using dBase III Plus to help in decision making. One chapter provides detailed instructions for creating a complete mailing list program. For some users, this chapter alone will be worth the price of the book.

Although *Understanding dBase III Plus* is clearly aimed at beginning users, there are enough little gems in it to make it worthwhile reading for intermediate users, too. I cannot imagine anyone getting through the book without coming across a useful tip or two. I am adding this book to my personal library as a quick reference source.

William J. Lynott is president of W.J. Lynott Associates, a management consulting firm in suburban Philadelphia. His CompuServe User ID number is 70007,420.

Planning and Budgeting with Excel

By Jeffrey R. Alves, William Fletcher and Dennis P. Curtin
Osborne/McGrawHill, 1986
439 pages, $17.95 (softcover)
Reviewed by Cheryl Peterson

When I started this book, I expected to be a bit bored by yet another book filled with sample spreadsheets and pages of repetitive instructions for creating them. While there certainly are many pages of instructions, the meat in between is well worth reading.

Surprisingly, this book spends more time discussing planning and budgeting than it does explaining Excel. After reading the credentials of the authors, this is not strange.

The authors start with a few assumptions about the readers' Excel and Macintosh literacy. This enables them to avoid lengthy instructions on how to set up the system, access Excel and format disks.

When explaining planning and budgeting though, they do a thorough job. They take the time to explain why and how to analyze profits, losses, cash flow and cash balance. They describe seasonal fluctuations, anticipating financial needs and preparing reports that show the business' current financial position.

The book includes a cash budget, pro forma income statement and pro forma balance sheet that can be adapted to most businesses. One chapter explains how to make necessary adaptations for your business. Another shows how charting can bring the figures to life. Although the three samples can be bought on disk, $39.95 for three overlays is very steep.

Computer, business and Excel tips separated from the text by boxes help break up what could have been lengthy, dull instructions. Some good advice can be found in these.

However, some of the attitudes expressed were a bit confused. While they say the principles in the book apply equally to small, medium and large companies, they slipped into the large corporation attitude of "find a good dealer and pay through the teeth if necessary to get a little computer support." Their recommendation to buy brand-name products with proven customer support makes sense. Expecting to get user support from the dealer is naive. For the most part though, their advice is well taken.

Planning and Budgeting With Excel offers instruction in the kind of business management principles that might be garnered from a college course and gears that knowledge toward a specific group of computer users. The authors have done much more than show how to use a spreadsheet program.

Cheryl Peterson, a free-lance writer from Miami Beach, writes reviews for several computer magazines. Her CompuServe User ID number is 72366.2645.

Electronic Edition Book Reviews

The following book reviews are available this month in *Online Today Electronic Edition* by typing GO OLT-240 at any prompt on the CompuServe Information Service.

I Didn't Know You Could Do *That* With a Computer, *by Dan Gutman, Compute! Books.*

The Algorithmic Image: Graphic Visions of the Computer Age, *by Robert Rivlin, Microsoft Press.*

Interactive Workstations: Hardware and Software, *by Dimitris N. Chorafas, Petrocelli Books.*

A Layman's Introduction to Robotics, *by Derek Kelley, Petrocelli Books.*

Advanced Turbo Pascal Programming and Techniques, *by Herbert Schildt, Osborne/McGraw-Hill.*

MacroModem

MacroModem from Kent Engineering & Design is telecommunications software for the Amiga computer.

The program effectively uses Amiga's macro commands, allowing the user to do in one keystroke the work of dozens. Retailing for $69.95, MacroModem features a special editor and sample macro templates for constructing files of macros for each telecommunications service and task.

For information, contact Kent Engineering & Design, 4215 Jordan Rd., P.O. Box 178, Mottville, NY 13119-0178; 315/685-8237.

GO EBB or circle 29 on the Reader Service Form.

Volkswriter Deluxe Plus Word Processor

Lifetree Software Inc. has introduced the Volkswriter Deluxe Plus word processor for the IBM PC family of computers and compatibles.

Retailing for $99, the program includes a spelling checker with a dictionary of 100,000 words including abbreviations, capitalization and city names. It checks for typos, repeated words and some punctuation errors. Up to 2,900 words may be added by the user. Other features include TextMerge, for creating personalized form letters, and NotePad, for recording spur-of-the-moment notes.

For information, contact Lifetree Software Inc., 411 Pacific St., Monterey, CA 93940; 408/373-4718.

GO EBB or circle 30 on the Reader Service Form.

To the Point

Point-to-Point is a powerful new telecommunications program for the Apple II series of computers from Pinpoint Publishing.

A major feature is the exclusive Extended XMODEM Protocol with CRC-16 that allows the sending of multiple files with complete original filenames, extensions and file attributes intact. Other features include a text editor, quick-keys to start macros at any line in the macro library and direct-connect local file transfers to 9600 baud. Retail price is $129.

For information, contact Pinpoint Publishing, 5001 Christie Ave., Emeryville, CA 94608; 415/654-3050.

GO EBB or circle 31 on the Reader Service Form.

Courier 1200 Modem

USRobotics Inc. has introduced the Courier 1200 modem at a list price of $499.

The 1200/300 bps, auto-dial, auto-answer, asynchronous device responds to the full "AT" modem command set and provides 14 user-adjustable "S-register" modem settings. It is an external device that may be connected to any computer or data terminal equipped with a serial interface. It is compatible with nearly all personal computer data communications software. Features include a "help screen," externally accessible programming switches and a nine-function LED front panel.

For information, contact USRobotics Inc., 8100 McCormick Blvd., Skokie, IL 60676; 312/982-5010.

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It's Dynamite

Dyna-MITE from Mycroft Labs is a new, top-of-the-line communications program for the IBM PC and compatibles.

Selling for $99.95, the program includes the MORSE communications language and emulation of more than 10 popular terminals. In addition, Dyna-MITE features XMODEM, YMODEM, Kermit and other file-transfer programs.

For information, contact Mycroft Labs Inc., 2615 N. Monroe St., Tallahassee, FL 32303; 800/MYCROFT or 904/385-1141.

GO EBB or circle 33 on the Reader Service Form.

Epson Dot Matrix

A new 80-column dot-matrix printer that provides high draft speed and touch button selection of draft and near-letter-quality printing has been introduced by Epson America Inc.

Designed for use by small businesses or in the home, the LX-86 prints at 120 cps in draft pica mode and 16 cps in near-letter-quality mode. The nine-pin dot-matrix printer operates both bidirectionally in text and unidirectionally in bit-image graphic modes. Retail price is $349.

For information, contact Epson America Inc., 2780 Lomita Blvd., Torrance, CA 90505; 800/421-5426 (nationwide) or 213/539-9140 (Calif.)

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Electronic Edition Product Announcements

The following new product announcements are available this month in *Online Today Electronic Edition* by typing GO OLT-250 at any prompt on the CompuServe Information Service.

Animate, *animation tool for the Apple IIc and IIe, Bröderbund Software Inc.*

Interword, *multilingual word processor for the IBM PC and compatibles, Computers Anyware Inc.*

File Genie, *utility for dissecting and analyzing files, Team Austin Inc.*

The Laser Quill, *word processing and desktop publishing software for the Apple Macintosh, F.L.I. Inc.*

On Balance, *personal finance program for the Apple IIe and IIc, Bröderbund Software Inc.*

TeleCAT-286, *compact personal computer, Televideo Systems Inc.*

Cell/Mate (Release 1.01), *error-checking software for Lotus 1-2-3 and Symphony worksheets, Clarity Software Corp.*

PowerPlan ST, *planning tool with electronic ledger for the Atari ST, Abacus Software.*

PC-Type +, *word processor for the IBM PC and compatibles, ButtonWare Inc.*

Sideways, *print utility software for the Apple II, Funk Software Inc.*

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(Martha) Explode sex myths.
(Howard) Share your feelings.
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From our Hotline: (Joanne, 50) In the Formerly Married section of your Support Groups I received excellent encouragement in dealing with my ex-husband. You touch many, many lives . . . (Jackie, 23) I think this is a very interesting and fantastic service you are doing in solving our problems sexually and emotionally . . . (William, 30) It's good that we have a place like this to ask questions about one of the most important aspects of our personal lives. I am glad to see the emphasis on caring, loving, equal and committed relationships that I have found here . . . (Ron, 18) My reaction to your Interactives: WOW!!! MORE!!! . . . (Peter, 38) Just read "How to Raise Sexually Healthy Children." Found it very informative and I left it feeling encouraged that my 3-year-old has a better chance of growing up sexually healthy than I did. I hope I can apply what I learned.

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13	33	53	73	93
14	34	54	74	94
15	35	55	75	95
16	36	56	76	96
17	37	57	77	97
18	38	58	78	98
19	39	59	79	99
20	40	60	80	100

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Forums Display Creative Designs

When videotex people used to talk about high-resolution graphics online, their feelings about ASCII-based services such as CompuServe could be summed up succinctly — "Can't be done."

Well, they were wrong. In recent years, CompuServe subscribers have conducted some fascinating experiments with high-resolution graphics, sending and receiving digitized photographs, line drawings, schematics, flow charts — all kinds of pictures — through a type of file called RLE (that is, "Run Length Encoded" files).

To get in on the action, you need three things: **The hardware**. You need a computer that can display high-resolution graphics. For some systems, that's standard equipment. For others, you'll need a graphics enhancement card.

The software. You need to use software that supports CompuServe's cursor-positioning codes. Of course, CompuServe's own VIDTEX/Professional Connection software does, as do some other commercial and public domain programs.

Configuration. You need to have your User ID number set up as "VIDTEX-compatible." This is the easiest part — just type GO TERMINAL at any prompt and choose the "Setting Terminal Type" option.

To get help with these and other questions about RLE graphics, a forum is available — Larry Wood's Online Picture Support Forum, accessible by typing GO PICS at any prompt. Larry and his two assistants, Mike Ward and John Lovell, have data libraries and a message board full of tips for displaying the artwork on a variety of computers.

Online pictures appear all around the system, some from menus, others in data libraries of forums. And there are public domain utility programs that allow you to download the graphic images and view them offline.

Once you have your software, hardware and configuration considerations ready, the easiest way to look at a picture is to visit one of the menu-driven galleries. For instance, fans of the CB Simulator have established a collection of RLE photos of themselves. To see it, type GO CBPIX. Look over the names and enter the number of the photo you want to see. The system will clear your screen and display the art, one pixel at a time.

RLE pictures are displayed in a 256-by-192 pixel arrangement. So when the RLE is accessed, the system will display the top row of pixels, then move to the next row, and so forth.

Incidentally, it's possible to "capture" this graphic as it is being displayed. Try this if you are using VIDTEX/Professional Connection software: First, press the menu number of the picture you want to see, but *do not* press the Return key yet. Instead, open the buffer (Meta-O), and *then* press Return (telling the system to begin the display). After the picture is displayed, close the buffer (Meta-C) and save it on disk with MetaS. Later, offline, you can redisplay the picture by loading it into the buffer (Meta-L) and displaying the buffer (Meta-D).

The online graphics also are available in data libraries of some forums, and they are just as easy to display there. But first you have to find them.

A sure bet is to visit the Picture Support Forum. Type GO PICS and, once inside the forum, type LN to display the names of the data library's subtopics. Choose one, then access it by typing DL (for Data Library) followed by the

subtopic number — for instance, DL8 to access Data Library 8.

All graphics files have the extension of .RLE, so to browse your chosen subtopic, type BRO (*).RLE (that is, BROwse files with the extension of .RLE). That will produce a list with a description of each RLE file.

When you have found one that looks interesting, *read* it. To do that, type R (for Read) followed by the filename. For example, R MICKEY.RLE would begin the display of a file called MICKEY.RLE.

RLE files also can be downloaded for offline use, if you have a utility for displaying them. Programming wizards in the various computer-specific forums have been writing such utilities and contributing them to the public domain. For more information, visit the forum that supports your computer and write a note to the forum administrator.

To get your own artwork online, let Larry do it. The Picture Support Forum will digitize photos or line drawings for you for a fee. A file called ORDER.TXT in DL1 of PICS gives the details.

Also some forums have produced utilities that digitize any screen into an RLE file. For IBM PCs and compatibles, Charles McGuinness of CompuServe has produced a memory resident program called RLEGEN.EXE in Data Library 2 of the IBM Communication Forum (GO IBMCOM). Similar software for other computers seems to be coming along. Check with the administrator of the forum that supports your system.
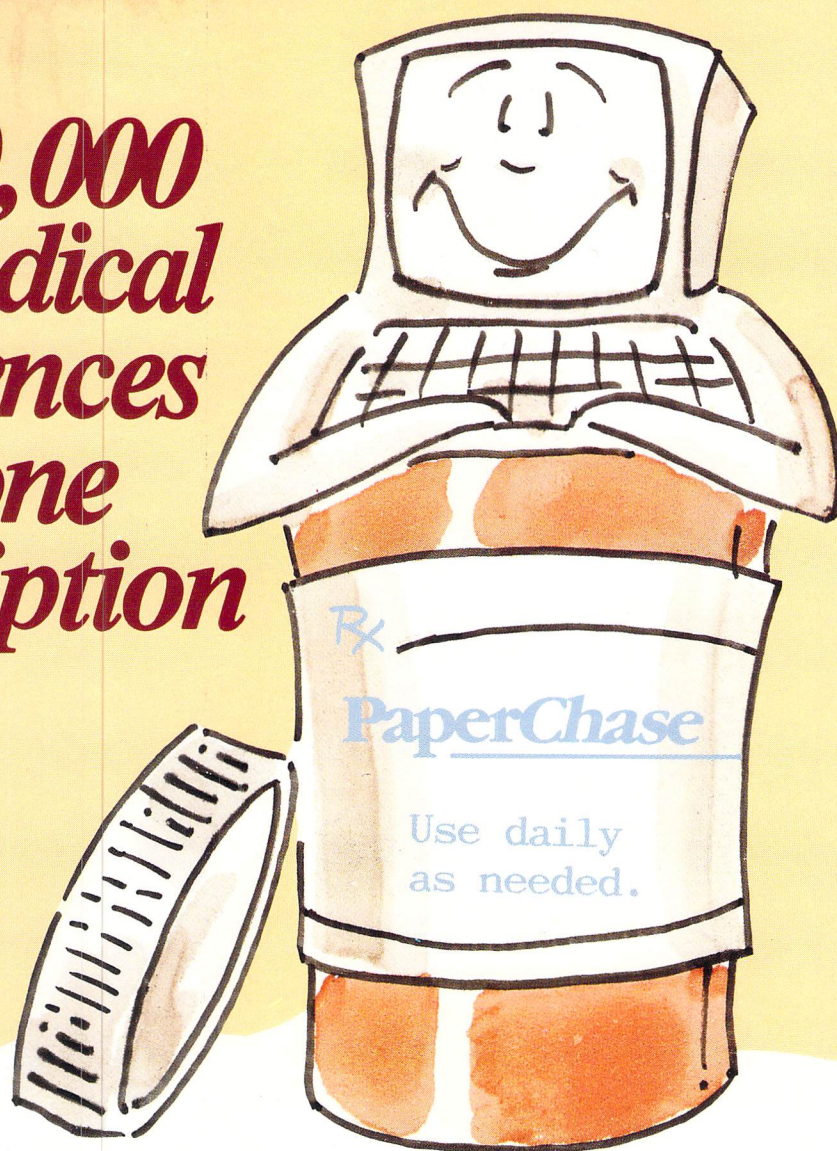
Here is a list of some of the places that now have RLE graphics in addition to the Picture Support Forum and the CB gallery:

Hollywood Hotline Art (GO HHA), a gallery of more than 100 film stars; the FBI Ten Most Wanted posters (GO TEN), a collection of bad guys; The Computer Art Forum (GO ARTSIG), various pictures in Data Library 7; the Weather service (GO MAP), a daily weather map; *MegaWars I* Pictures (GO MW1PIC), for those who want to see quadrant maps and pictures of the various fighting ships in the game, and Biorhythms (GO BIORHYTHMS), for an RLE illustration of the generated biorhythms chart; and the Missing Children Database (GO MIS-1), for photos of missing children.

To stay updated on the latest RLE offerings, type FIND GRAPHICS at any prompt.

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